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# THE CHEMIST & DRUGGIST SUPPLEMENT.

LONDON: 42 CANNON STREET, E.C.  
SATURDAY, JANUARY 21, 1899.

Businesses for Disposal  
Businesses Wanted  
Premises to Let  
Auction Sales

**ALSO EXCHANGE COLUMN.**  
For Bargains see last page of this Supplement.

Partnerships  
Situations Vacant  
Situations Wanted  
Miscellaneous

A Copy of this Supplement is inserted in every number issued of "The Chemist and Druggist."

**DON'T  
MISS  
IT**

Our Winter Number will be published next week, the 28th inst.  
The Cover will be as handsome as any of its predecessors.  
There will be Twelve Thousand Copies of it, and a Supplement in each one of them.  
That is 12,000 chances for each Advertisement inserted, without reckoning the extra Supplements given to those who want them.  
If you need a Situation, or an Assistant, to Buy or Sell a Business, or have anything to dispose of through the Exchange Column, send your Advertisement to us early in the week.  
We go to press earlier, but will receive Supplement Advertisements up to 4 o'clock on Thursday, the 26th inst.

42 Cannon Street, January 21, 1899.

## CHEMISTS' TRANSFERS.

**MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.**

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

**VENDORS** have the advantage of Messrs. O. & Co.'s direct attention and advice as to value without additional fee.  
**PURCHASERS** are invited to forward a statement of their requirements, which will be notified in a register free of charge.  
**VALUATIONS** having always been a prominent feature, Messrs. O. & Co. trust that the lengthened period during which they have enjoyed the confidence of the profession will be regarded as a sufficient proof of the sincerity of their endeavours to conduct these transactions in an honourable and straightforward manner.

1.—**£700.—LONDON, S.W.**—Good ready-money Retail Business; returns present rate £700, with excellent profits; nicely-fitted shop and good working stock; convenient residence, held on lease; price £350.

2.—**£700.—LONDON (Middle-class Suburb)**—Modern Pharmacy, well situate in busy main thoroughfare; returns £700; net profit about £250; well-fitted shop and large stock; good house, held on lease; price £550.

3.—**£1,000.—EPPING FOREST (near)**—Old-established Business; Retail and Family trade, with Wholesale for one speciality attached; returns between £950 and £1,000; the population of the locality is very much increasing; good stock, &c.; price to be arranged.

4.—**£650.—LONDON (South)**—Lock-up shop, large and imposing front, and roomy premises; well established; returns, under assistant, £650 yearly; capital position for modern trading; ready-money business; valuation of stock and fixtures only required; about £500.

5.—**£550.—LONDON SUBURB (Crystal Palace District)**—Old-established Family Business; average £550 yearly; easily worked; profits good; house contains 7 rooms, large garden attached; moderate rental, on lease; price £480.

6.—**£250.—BLACKHEATH**—Light Retail and Dispensing Business, situate in business thoroughfare; returns present rate £250; attractive shop; capital opening for modern trading; small residence; rent moderate; price £150.

7.—**£600.—LONDON, N.**—Old-established Business; Dispensing and Retail; returns about £600 yearly; handsomely-fitted shop; good house, held on long lease; price £475.

8.—**£1,200.—HOME COUNTY**—Modern Pharmacy; well situate in busy main road; returns last year £1,200; net profit £400; well-fitted shop and good stock; convenient residence; side entrance; price £750.

9.—**£800.—LIVERPOOL STREET STATION (one hour from)**—Death vacancy; old-established Business; returns exceed £800 per annum; good business premises and residence; price £100; goodwill and valuation of stock and fixtures.

10.—**£800.—MIDLANDS**—Retail Dispensing and Prescribing Business; returns last year £800; profit £300; several good Proprietaries selling well; nicely-fitted shop and good working stock; price £450.

11.—**£1,200.—OXFORDSHIRE**—Old-established Business; no heavy trade; returns last year nearly £1,200; net profit £300; commodious residence, held on lease; rent £35 yearly; price £950.

12.—**£500.—SHROPSHIRE (Death Vacancy)**—Old-established concern; returns £500; easily increased by a principal; good-sized house; lease if wished; price £300, or valuation of stock and fixtures.

13.—**£925.—HOME COUNTY**—Retail Prescribing and Dispensing Business; returns last year about £925. The shop is well fitted and stocked; house contains 9 rooms; side entrance; price about £750.

14.—**£1,530.—KENT**—Good-class Dispensing and Retail Business, with Mineral Waters; returns £1,530 (about); net profit £572; vendor's ill-health requires him to relinquish business; price about £1,425.

Particulars of any of the above will be furnished on application.

**N.B.—NO CHARGE TO PURCHASERS.**

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.  
Messrs. ORRIDGE & Co., invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London Agent.

**SPECIAL NOTICE.**—Messrs. ORRIDGE & CO. have a large number of Businesses for Sale suitable for Gentlemen with small capital, from £200 to £500.

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# F. J. BRETT

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**VALUATIONS.**—The long and varied experience of F. J. BRETT in Valuing all classes of Businesses throughout the United Kingdom, together with his ever-increasing connection, renders it desirable that you should secure his services, in order to have your interests well protected. Stocks carefully taken.

£600 returns.—**WORCESTERSHIRE.**—Good-class Light Retail; no heavy trade; net profit £200 under Manager; valuation £350.

£1,200 returns.—**MIDLANDS.**—Good General Retail, with several proprietaries; this business is thoroughly sound, and bears a net profit of £350 per annum; price about £1,000.

£800 returns.—**LINCOLNSHIRE.**—Good Country Retail, having a large and profitable connection for veterinary medicines; net profit one-third; price £450.

£800 returns.—**WEST.**—Good Country Retail; can be much increased; for sale under exceptional circumstances; large house, garden, &c.; lease; price to cash buyer £325.

£800 returns (about).—**LANCS.**—General Retail, in good position of manufacturing town, capable of considerable extension; price £560.

£700 returns.—**MIDLANDS.**—Unopposed Retail, in thriving village; energetic man would do well; large house, garden, &c.; price £250.

£500 returns.—**NOTTINGHAM.**—Good-class Light Retail, with fair Dispensing; returns increasing; shop well and attractively fitted; valuation about £400.

£400 returns.—**YORKSHIRE.**—Watering place; Light and profitable Retail; improving part; price £200.

£650 returns.—**LONDON, W.**—Light Retail and Dispensing; in present hands many years; good reliable business, well suited for young pushing man; rent nominal, as house sublets for most of the rent; price £650, or valuation of stock and fixtures.

## WANTED.

F. J. BRETT has numerous inquiries for Businesses of all sizes and classes, and can speedily sell your Business for you.

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CHEMISTS' TRANSFER AGENTS AND VALUERS,

35 JEWRY STREET, FENCHURCH STREET, E.C.

Established 1870.

**VALUATIONS** are in all cases conducted by a member of the firm, and the most careful attention to details, which is so essential, may be relied upon.

1.—**DEVON (North).**—Capital market town; Mixed Retail Drugs and Wines and Spirits; returns £1,400; net profit £400; good house, low rent; price £850; stock and fixtures worth £800.

2.—**SOUTH WALES.**—Ready-money Retail and Prescribing Business; returns £1,000; net profit £400; every proof given; shop is well fitted and stock; low rent, long lease; good house; price £750.

3.—**DERBYSHIRE.**—Light Retail and Prescribing Business; returns £600, and increasing; low rent; good house; profitable trade; price £250, or valuation of stock and fixtures.

4.—**SOUTH COAST.**—Rising residential locality, near the sea; good-class Retail and Prescribing Business; returns £7 to £8 weekly under management; good house, bath-room; price £225.

5.—**OXFORDSHIRE.**—Light Retail and Prescribing Business; returns £7 weekly; rent £35; good house and garden, modern fitted; good stock; price £180, simply valuation price.

6.—**BRADFORD, YORKS.**—Light Retail and Prescribing Business; returns £350, capable of increase; rent £35; nice house; shop is well fitted and stock; price £220, or offer.

7.—**CAMBRIDGESHIRE.**—Unopposed village Business, greatly neglected; rent £12, with house and large garden; ought to do £10 weekly; price £150 to £200, by valuation.

8.—**LONDON, S.W.**—Good-class Retail and Dispensing Business in high street of first-class suburb; returns over £1,100; elegantly fitted and well stocked; price £850.

9.—**LONDON, W.**—Main road; under management; return £10 to £12 weekly; can do £18 to £20 weekly; price £250 or offer.

## BUSINESSES WANTED.

**MESSRS. BERDOE & CO.** have a number of clients wanting to purchase Businesses returning £800 to £1,500, and would be glad to correspond with gentlemen wishing to dispose of same.

NO CHARGE TO PURCHASERS.

35 JEWRY ST., FENCHURCH ST., CITY.

# JUDD & MANNERS

CHEMISTS' VALUERS,

Transfer Agents, Partnership Negotiators, Arbitrators and Accountants,

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**YORKSHIRE.**—Family Retail Business; handsomely fitted shop in very convenient house; returns £14 weekly, and steadily increasing; price £300 or valuation; satisfactory reasons for selling.

**NORTHERN SEASIDE RESORT.**—Light Retail Prescribing Dispensing Business in good corner position; returns £750, with profits, and increasing monthly; price £550 or offer.

**LONDON, S.E.**—First-class; Retail Dispensing and Prescribing Business in handsome shop and large house; net profits over £500; price £1,100, satisfactory reasons for disposal.

Particulars of either of the above free on application.

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Valuations Conducted with careful attention to details.

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£700 returns.—**MIDDLESEX.**—Light Retail, Dispensing, and Family trade; rapidly increasing; convenient house, rent £30, on 14 years' lease; price valuation of stock and fixtures; pleasantly situated business.

£1,000 returns.—**YORKSHIRE.**—Mixed General Retail trade; convenient premises, good house; rent £35; at present under the drawback of unqualified management.

Particulars of other genuine Businesses in various localities, and of different sizes and classes, may be had upon application by bona fide purchasers.

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Telegraphic Address—"TOMTOM." Telephone No. 3965, National.

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3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

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**COMPLETE** Fittings of Chemist's Shop for Disposal; rectangular mahogany counter 8 feet by 8 feet; dispensing screen; desk and case; show cases; 55 mahogany drawers with shelving, &c.; shop chairs; 9 dozen shop rounds, gold labels, 10 to 20 ounces; 2 dozen pots, gold label window enclosure. Davis, Chemist, Clydach, Swansea Valley.

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**CHEMISTS' Shop and Open Surgery.**—Wanted, a young Chemist to take management and invest £100 in above business, situated in one of the busiest central main thoroughfares in London; an excellent opening. Address, 259/2, Office of this Paper.

## APPRENTICESHIPS.

**APPRENTICE** wanted, in a high-class Dispensing Business; every opportunity of learning the business; one who has passed the Preliminary preferred; moderate premium, short hours. Apply, D. Huggins, 14 New Bond Street, Bath.

**APPRENTICE.**—S. Stephenson, F.C.S., Pharmaceutical Chemist, 98 Kensington, Liverpool, has a vacancy, indoors; premium moderate.

**WANTED,** an outdoors Apprentice, in a large Retail establishment in the Midlands; premium required. Apply, "Strophanthus" (159), Office of this Paper.

**WANTED,** for good-class Suburban Pharmacy, a gentlemanly young man as Apprentice; passed Prelim. or equivalent preferred; good opportunity to learn the business thoroughly, under the direct personal supervision of the principal; time for study arranged; moderate premium indoors. Apply, Frank A. Smyrk, Chemist, Moseley, Birmingham.



## TO SUBSCRIBERS ABROAD.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents, or assistants, or wish to sell their businesses, an advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the easiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

## BUSINESSES FOR DISPOSAL

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

**BIRMINGHAM (near).**—Large busy country town; good Mixed Cash Business (Branch); Light Retail, Prescribing, &c., centrally situated; only wants personal attention to greatly increase the business (always been under managers); net profits last year about £200; will accept valuation of stock and fixtures (about £350); nothing for goodwill. Apply, "Proprietor" (255/29), Office of this Paper.

**BLACKPOOL.**—Very high-class Retail and Dispensing Business for Sale; Promenade; good profits; lease; splendid opening; price about £350. Particulars on application, Wilkinson, Blackpool.

**GLoucestershire.**—For immediate Disposal, a genuine Ready-money Mixed General Retail; held by late owner 35 years; returns about £1,300; very good profits; full investigation invited; no other chemist in the neighbourhood. Apply, "Holk," c/o Barron, Harveys & Co., 6 Giltspur Street, London, E.C.

**Hampshire.**—Small Chemist's Business for Disposal; house attached; rent £25, including fixtures. Apply, "Pearash" (254/34), Office of this Paper.

**SLE OF MAN.**—Rare chance. For disposal, high-class Retail and Dispensing Business; principal thoroughfare; most elegantly fitted island, valuable specialties; cost £1,100 three years ago; business much improved since then; owner going to South Africa; will accept £850; returns £1,000; unlimited scope; splendid house; no qualification necessary. Particulars from J. Guy, Queen's Park, Chester.

**KING'S LYNN.**—Light Dispensing and Retail Chemist Business for Disposal in good thoroughfare, not far from the Docks (near Cattle Market); rent low; stock, fixtures, &c., £250 or offer. Apply, 108 Norfolk Street, King's Lynn.

**Lancashire.**—Old-established Chemist's Business; returns about £400 under management; could easily be increased; rent £18; price £175; good chance for beginner. W. Heywood, Chemist, Heywood.

**Lancashire.**—Light Retail and Dispensing; well stocked; returns about £550, increasing; large population; little opposition; good opening for Dentistry; ill-health cause of sale; price £550. Apply, 51/1, Office of this Paper.

**Lincolnshire.**—£1,118 returns, increasing; Mixed Retail, Agricultural, and Wine and Spirit Business for Sale in rising country town in Lincolnshire; now under management; good shop; best position; electric light; price £1,000 (which is value of stock, fixtures, and book debts). Apply, 251/6, Office of this Paper.

**LIVERPOOL.**—First class Retail and Dispensing Chemist, in leading thoroughfare; takings £900; principally own proprietary articles; very few patents; will sell property and business, or separately; present owner in indifferent health, hence disposal; splendid opportunity for business man. Apply, Geo. Lloyd, Accountant, Westminster Chambers, Crosshall Street, Liverpool.

**LONDON, N.E. (Suburb).**—Doing profitable trade under indifferent management, will do £20 a week under principal; exceptional chance for young man; owner, fully occupied otherwise, must sell immediately; good house, main road; shop well fitted and stocked; established 3 years; rent £35; price £175, only half its value. "Alpha" (255/12), Office of this Paper.

**LONDON (Near)**—14 miles out, West, a good-class Light Retail, Dispensing, and Prescribing Business; returns over £1,300, and taking a clear net profit of nearly £450 yearly; held on lease at low rent; owner leaving the trade; price £850; strictest investigation offered. Neroi" (258/8), Office of this Paper.

**LONDON, N.**—A neglected Dispensing, Retail, and Proprietary Business; long established; by personal attention can do £1,300 to £1,400; large stock; well-fitted shop; in commanding position; comfortable house at low rental; business references required; good reasons for disposal; price £900. "Ourmail" (258/27), Office of this Paper.

**LONDON, S.E.**—Retail, Dispensing, and Prescribing; opposition comparatively slight; rapidly-increasing neighbourhood; returns £450, increasing; price £350; good house, 14 years' lease; reason for selling, stirring from business; genuine concern. 258/34, Office of this Paper.

**MEXBOROUGH (near Rotherham).**—Branch Shop in increasing neighbourhood; modern fittings; stock light; may be rented as pick-up shop or with excellent six-roomed house attached; through exceptional circumstances low valuation for stock and fixtures accepted. Apply, R. J. Shields, 56 High Street, Mexborough, Rotherham.

**NORWICH.**—Retail and small Wholesale, in busy thoroughfare; returns £450; shop well fitted and stocked, with convenient house adjoining; rent £40; price about £350, or valuation; proprietor leaving; capital opportunity for energetic business man. Apply, Smith & Sons, Wholesale Druggists, Norwich.

**SURREY HILLS.**—First-class Retail and Dispensing Business, returning over £900 almost entirely under management; scope for much increase; satisfactory reasons for selling; good house and garden; price £850, or by valuation if desired. "Gualacol" (258/9), Office of this Paper.

**SUSSEX (Coast).**—Elegantly-fitted and up-to-date Pharmacy, in excellent position, near the sea; fashionable town; returns over £900, steadily increasing; early sale desired; advertiser will accept £700, which is little more than value of stock and fixtures; lease worth £200 thrown in. "Acacia" (258/7), Office of this Paper.

**WORCESTERSHIRE.**—Profitable Light Retail Business; busy thoroughfare, centrally situated; noble, double-fronted shop, plate-glass windows, nicely fitted shop; good house (recently papered throughout), private entrance, rent £35, lease; present returns, improving, almost £8 weekly; valuation, no goodwill, about £250; desirable investment; chance seldom met with. "Sapo" (255/30), Office of this Paper.

**A BARGAIN.**—To be Sold for less than value of stock and fixtures, both good and ample; good business opportunity; now under unqualified management; owner residing twelve miles away; best position in Glossop; plate-glass front; low rent. Apply, A. Golden, Chemist, Levenshulme.

**COMPULSORY SALE.**—Satisfactory reasons, together with fullest particulars, given to bona-fide purchasers of Old-established Business as going concern for immediate disposal; situated in good class suburb with Retail Wine Licence; returning £1,200; net rent £40; long lease; no reasonable offer refused; no agents need apply. "Camphor" (255/2), Office of this Paper.

**FOR immediate Disposal, a good-class Family and Dispensing Business, in select residential suburb of London; returns £1,100, with profits above the average; price £1,050, or offer; very good house and garden. For full particulars apply "Hydrargyrum," c/o Messrs. Newbery & Son, 1 King Edward Street, E.C.**

**GENUINE Business for Sale; good reasons for leaving; no reasonable offer refused; East London district. Apply for particulars to A. U., 40 Aldersgate Street, London, E.C.**

**GOOD-CLASS Dispensing, Retail, Prescribing, and Proprietary in one of the best parts of London (W.); can be easily increased; returns about £600; handsomely-fitted pharmacy; price about £300. Address, S. W. (258/29), Office of this Paper.**

**IMMEDIATE Disposal, good reasons, busy Suburb, 30 miles from London; business could be greatly increased; lax management; £120; part could remain; easy terms to genuine man. 248/6, Office of this Paper.**

**LUCRATIVE Branch Business in a thriving and populous town in North Lancashire; within tramway journey of a popular seaside resort. Full particulars respecting returns, profits, tenancy, and price on application to "Nemo," c/o Evans, Sons, & Co., Liverpool.**

## TO DRYSALTERS AND DRUGGISTS.

**TO be Sold by Private Treaty, the Business at present carried on by R. E. Harrison at 151 Wheeler Street, Birmingham; ingoing about £300; weekly takings about £18. For further particulars and to view, apply Messrs. Poppleton & Appleby, Chartered Accountants, 25 Corporation Street, or to Mr. J. D. Kerr, Accountant, Martineau Street, both of Birmingham.**

**£75 WILL purchase a snug little Chemist's Business; well stocked and fitted; going concern; takings low, under management; reason of selling unable to attend to it owing to other duties; good growing neighbourhood; good chance for a business man; rent low, house good; a bargain. Drug Stores, Boundary Road, Walthamstow, Essex.**

## BUSINESSES WANTED.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

**ADVERTISER is open to Purchase, for cash, a good, sound Retail and Dispensing Business, showing a turnover of £1,000 to £1,500; could take immediate possession, if required. Please state full particulars, in confidence, to R. W. Houfe, Claremont, St. Catherine's, Lincoln.**

**ADVERTISER wishes to purchase Business returning from £800 to £1,600; must have fairly long lease and moderate rental; London preferred. Apply, R. O. (99/222), Office of this Paper.**

**GENUINE, good-class Business wanted, in London (objection to East) where Dentistry could be added; must be sound; or Managership, with view to purchase; no agents. Replies in confidence to "Genuine" (256/9) Office of this Paper.**

**WANTED, good Agricultural Business, in healthy locality, Lincolnshire, Yorkshire, or Nottinghamshire preferred; must bear strict investigation and be thoroughly genuine concern, yielding net profit after all expenses of £250 to £350. Applicants must give detailed particulars in confidence, "Arca-nut" (253/14), Office of this Paper.**

**WANTED to purchase a genuine Chemist's Business, with a net profit of £300 or £400 per annum; Branch, or good Business that has been neglected not objected to; only those whose businesses can bear investigation should reply; cash ready for immediate purchase. Reply confidentially to "Mersey" (255/15) Office of this Paper.**



## TO LET.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

**GENUINE** opening for a Chemist, in a rapidly-increasing district; capital shop and house to be Let, in a good position; Chemist much needed; rent only £35. Goodman, 2 Brigstock Road, Thornton Heath.

**TO** Let, at Torquay, a bold corner House and Shop, fitted for Chemist, with splendid fittings; been occupied same Chemist nearly 12 years; in a first-class neighbourhood; very pleasant house, where a good trade could be made; possession at once, if required. Apply Grist, Riding School, Torquay.

## SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

*The Publisher of "The Chemist and Druggist" wishes it to be understood that he is not in any way responsible in respect of Advertisements answers to which are to be sent to this Office.*

*Assistants applying for any of the Situations advertised below are recommended in no case to send Original Testimonials. If they send Photographs or any Documents which they wish to have returned, a Stamped Addressed Envelope should be enclosed.*

### RETAIL.

**ABERDARE.**—Wanted, Junior Assistant, Welshman, for good-class Drug business; hours short; weekly half-holiday. Apply, Walter H. Jones, Pharmaceutical Chemist, Aberdare.

**AYLESBURY.**—Qualified Assistant, with good recommendations for great R-tail business; outdoors; abstainer preferred. Wood, Pharm. Chemist, Aylesbury.

**BANBURY.**—Junior Assistant; outdoors. Send full particulars and photo, if possible, to A. E. Fox, Chemist, Banbury.

**BATH.**—Wanted, an Assistant; good Dispenser and Counterman. Apply, stating age, height, experience, salary required (indoors), enclosing photo, to W. Bright & Son, 26 Southgate Street, Bath.

**BIRMINGHAM.**—Wanted, Assistant (indoors), for February 17th: good Dispenser and Counterman; qualified preferred; state full particulars. Apply, Ferriday, 165 Hagley Road, Birmingham.

**BISHOP'S CASTLE.**—Wanted, a Junior Assistant; indoors; accustomed to a good-class Mixed Agricultural and Dispensing business. G. Strawsou, Chemist, Bishop's Castle, Shropshire.

**BRIGHTON.**—Outdoor Assistant; about 23. Give particulars of experience and salary required, state when disengaged, and enclose photo, Headland & Co., North Street, Brighton.

**BRIGHTON.**—A Junior Assistant, about 22 (indoors), accustomed to a good-class Dispensing and Retail business; abstainer; half-holiday weekly. Address, with particulars, age, height, salary required, and reference, enclosing photo, to Mr. Vizir, 154 Marine Parade, Brighton.

**CARDIFF.**—Assistant for the Drug-counter; must have Minor qualification. Please state age, height, references, and salary, to Jesse Williams & Co., Chemists, Cardiff.

**CHARD.**—Reliable, gentlemanly Assistant who has been accustomed to good-class Country business; unqualified; indoors. Apply, with photo, stating age, height, experience, and salary, to W. H. Smith, Chard.

**CHELTENHAM.**—Wanted, a good Assistant as Manager. Apply, stating qualification, age, height, experience, with reference and salary required, to J. Stewart, 389 High Street, Cheltenham.

**CHESTER.**—Wanted, immediately, a qualified Assistant; indoors; good Dispenser and Counterman; aged about 28. Apply, stating age, height, experience, salary required, enclosing photo, to Thos. Carter, Pharmaceutical Chemist, Boughton, Chester.

**CORK.**—Wanted, competent Assistant, qualified, for Retail Dispensing department; rooms and attendance supplied. Apply, enclosing references, carte de visite, and state salary expected, Kilohs, Cork.

**CROYDON.**—Wanted, a Junior Assistant; outdoors. Apply, giving full particulars, to D. P. Roberts, Chemist, 120 North End, Croydon.

**EAST MOLESEY.**—Junior required (indoors) in good-class Retail and Dispensing business. Apply, with full particulars as to past experience, age, height, salary required, &c., and photo (to be returned), J. Johnstone Tweedie, Hampton Court Pharmacy, East Molesey.

**GREAT MALVERN.**—Wanted, Assistant for Dispensing business; indoors; 21 or 22; Minor: one only kept; must have good moral character. State salary required, and usual particulars, to Thomas Fox, Great Malvern.

**HARROGATE.**—Senior Assistant (qualified) required for high-class Dispensing and Family business; indoors; Partnership entertained if suitable gentleman with capital. Apply, with full particulars, to Freshfield Reynolds, Pharmaceutical Chemist, Harrogate.

**HORNCASTLE.**—Wanted, Junior accustomed to good Family and Dispensing business. Enclose photo and state terms to Carlton & Sons, Chemists, Newcastle.

**HULL.**—Wanted, immediately, Turnover Apprentice or Improver. Retail business; short hours, half-day holiday weekly; time allowed and facilities for study. Apply, with usual particulars, G. A. Hethwaite, Chemist, Drypool, Hull.

**INDIA.**—Qualified Assistant wanted for an old-established business in Calcutta. Must be single, of good address, and have had experience with firms doing a good-class trade; 4 years' agreement; passage out home paid. Further particulars can be had on application to 254 Office of this Paper.

**JOHANNESBURG.**—Bookkeeper wanted; must be capable of keeping a set of books by double entry; one who has had experience Druggist's business preferred; salary £17 per month for 1st year; £18 2nd; and £19 for 3rd year; second-class passage paid; three years' agreement to be signed. Apply, stating experience, to T. L. (259/20), Office of this Paper.

**LANCASHIRE (S. side).**—Junior Assistant for Mixed trade; energetic; one accustomed to pushing Store trade preferred. Send particulars, including age, height, references, photo, and state previous experience, 161/6, Office of this Paper.

**LIVERPOOL District.**—Wanted, smart Junior; indoors or outdoors. Apply, giving references, age, and salary required, and if possible enclosing photo (to be returned), to "Collodion," c/o Evans, Sons & Co., 55 Hanover Street, Liverpool.

**LIVERPOOL.**—Immediately, Improver or Junior, to assist at Dispensing Counter and put up Stock; hours 8.30 to 8.30; do alternate nights and Sundays; weekly half-holiday from 12.30; time study (Liverpool School of Pharmacy) can be allowed by arrangement; outdoors: apartments very moderate; qualified Senior kept. Peers Chemist, Waterloo, Liverpool.

**LONDON, N.**—Wanted, good Junior Assistant; 21 to 23 years of age; indoors. Personal interview preferred, if by letter send photo and all particulars of previous experience, to T. S. Davey, 9 Parkhurst Road, Camden Road, N.

**LONDON, S.E.**—Wanted, at once, Assistant; indoors; time allowed for study and to attend lectures. Apply, personally if possible, with full particulars, to Neathercoat, Chemist, 16 Denmark Hill, Camberwell Green.

**LONDON, City.**—Junior; qualified; outdoors. Personal application only, to Pierce, Tulley & Co., late the General Apothecaries' Co., Bishopsgate Street Within.

**LONDON, W.**—Immediately, qualified Assistant as Dispenser, about 23 years of age, in high-class Dispensing business. Apply, W. H. Bates, Harrington Road, Queen's Gate, S.W.

**LONDON, W.**—Junior Assistant, where five others are kept. State age, height, salary required (indoors), enclosing photo if convenient, Chas. W. Brumwell, 118 Holland Park Avenue, W.

**LONDON, W.**—Wanted, energetic Junior for good-class business; come from good provincial house not objected to. Apply, with photo and full particulars, to Curtis, House & Co., 12 The Mall, Ealing, W.

**LONDON, N.W.**—Wanted, Dispenser for Surgeon; student or otherwise; must be smart and accurate Dispenser; hours, morning 9 to 12, evening 6 to 9. Apply by letter, giving particulars to, "Surgeon" c/o C. Ooutts Michie, Chemist, 175 Kentish Town Road, London, N.W.

**LONDON, S.E.**—Junior for Cash trade; outdoors; close at 5 Thursdays. Apply, with full particulars, to Manager, Hoops Drug Stores (Lim), 59 High Street, Peckham, S.E.

**LONDON, W.**—A qualified Assistant; indoors; one only kept; about 23 years of age. Apply, stating age, height, experience, and salary, to R. S. Dampney, 87 Abingdon Road, Kensington, W.

**LONDON, N.**—About February 3, a Junior Assistant, good Dispenser; indoors; early evening weekly; half-holiday fortnightly time off daily; Sunday duty every fourth Sunday. Please address full particulars to "Chemist," 675 Holloway Road, Upper Holloway, N.

**LONDON**—Qualified Junior wanted; age about 24; excellent prospects for suitableness. Apply, 68 High Street, South Norwood.

**LONDON.**—Wanted, at once, Manager for Branch; outdoors; experienced and accustomed to Store prices. Apply, with all particulars to 258/14, Office of this Paper.

**LONDON, S.E.**—Part-time Assistant or Improver required, in good-class business. Apply, Oullen & Co., 2 Pavement, Selshurst Road, South Norwood, S.E.

**LONDON, N.W.**—Wanted, at once, a smart Junior or Improver, in high-class Cash business (counter and putting up stock); indoors; 6 assistants kept; salary and commission. Apply, personally or by letter "Manager," 265 Finchley Road, South Hampstead.

**LONDON, S.W.**—Manager for Branch, to live on premises; aged about 30; qualified; good references. In reply give as full particulars as possible, Bunker, 135 Great Dover Street, S.E.

**LONDON.**—Wanted, a good Junior Assistant, about 23 years of age; indoors. Personal interview preferred; if by letter send photo and all particulars as to salary, &c., to J. Carr & Co., Pharmaceutical Chemist, 171 High Holborn, W.C.

**MANCHESTER.**—Qualified assistant; aged about 24; state height, experience, salary required (outdoors). Apply, Jeans & Co. Chemists, Pendleton, Manchester.

**MILDENHALL.**—Wanted, a single qualified Assistant to help managing a Light Retail and Prescribing business; agricultural neighbourhood; no Sunday duty; easy hours; comfortable home; situation indoors. Reply, stating salary (enclosing photo if possible), and giving references, to George J. Chifney, The Pharmacy, Mildenhall.



**NORTH WALES.**—Wanted, Manager for Branch in country (colliery district); good house, free; salary and commission; permanency to a good man; one with some knowledge of Dentistry preferred; must be active, steady, and pushing. "Druggist," c/o Evans, Sons & Co, Liverpool.

**NOTTINGHAM.**—Wanted, Manager, for small Branch, qualified; Extractor; married, no family preferred. Give references last two employers and full particulars, Cook, Chemist, Nottingham.

**OLDHAM.**—Wanted, smart active Junior (outdoors), about 20, for pushing Retail business; must be quick and reliable, and a good Counterman. Address, stating age, experience, references, and salary required, with photo, to J. & J. Thompson & Co., Lim., 192 Manchester Street, Oldham.

**PEMBROKE DOCK.**—Wanted, a good Junior Assistant, about 20 years of age, for General Retail; must be well recommended. Apply, stating age, height, experience, salary, and photograph, if convenient (which will be returned), to J. H. Bowling, Chemist and Dentist, Diamond Street, Pembroke Dock.

**REDHILL.**—Wanted, a reliable Assistant, accustomed to good-class Retail and Dispensing with Photography; qualified preferred. Padwick, Redhill.

**SCARBOROUGH.**—Manager, qualified, for Light Retail, Dispensing, and Prescribing business, with Dentistry; Registered Dentist preferred; permanency; Assistant and Apprentice also kept; half-holiday weekly; good salary and commission. For particulars, please apply, enclosing photo if convenient (to be returned), together with references, which must bear strict investigation, Cuttle, Castle Road, Scarborough.

**SHAFTESBURY.**—Wanted, at once, Junior Assistant, in good-class Family business; indoors; comfortable home; half-holiday weekly; apprentice kept. Apply, with full particulars, and enclose photo, to F. Richards, Chemist, Shaftesbury.

**STAMFORD.**—Junior wanted, immediately; good opportunity for Improver. Apply, with full particulars and photo (to be returned), Dickinson, 13 St. Mary's, Stamford.

**SUTTON.**—Wanted, a reliable Junior Assistant for a Dispensing and Prescribing business; long evening off weekly. Apply, with full particulars, to F. P. Frost, Sutton, Surrey.

**TONBRIDGE.**—An Assistant, about 24, indoors, accustomed to a good-class Dispensing and Retail business. Address, with usual particulars, enclosing photo (to be returned), to S. F. Wardley, Tonbridge.

**WALES.**—Wanted, a qualified Junior Assistant for a good-class country business; easy hours; close 4 P.M. Thursdays; no Sunday duty. State age, salary, and usual particulars, in first instance, to Bawtree Humble, Chemist, Putney.

**WELSHPOOL.**—Wanted, good Junior Assistant; indoors. Please give full particulars; apply "Chemist, 33 Broad Street, Welshpool.

**WINDSOR.**—Junior Assistant, qualified; outdoors; must be well recommended and accustomed to good-class Dispensing. State age, height, salary required, &c., R. Wool, Pharmaceutical Chemist, Windsor.

**WOTTON-UNDER-EDGE.**—Wanted, a good Junior Assistant, for Mixed Agricultural business; indoors. Apply, with full particulars, to Frank Portlock, Chemist, Wotton-under-Edge.

**WORCESTER.**—Wanted, Junior (outdoors), with knowledge of Photographic trade. Send photo and reference, and state salary required, to Alex. Milne, Chemist, Worcester.

**WORTHING.**—Assistant, about 23, in good-class business; good Dispenser. Apply, with references, and usual particulars, to W. Aston, Pharmaceutical Chemist, Worthing.

**YORKSHIRE.**—Outdoors; qualified Assistant for a neglected Store business, in main thoroughfare; must be a smart, gentlemanly Counterman, and a good Window-dresser; knowledge of Photography an advantage, and a gentleman desiring a permanency necessary. Apply, with full particulars, to "February" (249/6), Office of this Paper.

**YORKSHIRE.**—Wanted, a qualified Assistant, about 27, for good class Country business. Please state age, height, salary required (outdoors), married or single, and all other particulars in first letter to "Radix," c/o Evans, Sons & Co., Liverpool.

**ANDERSON & VIRGO, Chemists, Worcester,** require a good Junior Assistant; state age, height, references, salary required, &c., and enclose photo.

**ASSISTANT:** 30 to 35; qualification not necessary; must be smart and up to date. Give full particulars as to height, salary expected (indoors), and photo if convenient (to be returned), to "Radix," Hodgkinson, Clarke & Ward, 101 Whitecross Street, E.C. One able to assist in the management.

**FOR CHINA.**—An Assistant, accustomed to first-class Dispensing and Retail business; four years' agreement; passage paid out and home. Address, "China" (258/12), Office of this Paper.

**JOHN BARKER & CO. (LIM).** Kensington, W., are in want of a Counter Assistant; indoors; close at 6.30, 2 o'clock Saturdays.

**JUNIOR,** beginning of February; comfortable home; easy hours. Send full particulars of experience, salary required, &c., enclosing c.v., to Smart, Pharmaceutical Chemist, Steyning, Sussex.

**WANTED,** Dispenser and Bookkeeper. Apply, stating age, experience, salary, Edward V. Perry, Reepham, Norfolk.

**WANTED,** qualified Manager to manage Store Business in Lancashire; must be well up in Store trade; house unfurnished;

**WANTED,** for first-class Retail and Dispensing, a qualified Assistant, where two are kept; good appearance and address. State age, experience, and salary required to Mr. R. W. Walden, 65 Elizabeth Street, Eaton Square, London, S.W.

**WANTED,** Assistant, registered, to manage a small Mixed Country Retail and Prescribing business in a colliery district in Durham; house unfurnished; hours short. Apply, stating salary, experience, references, age, &c. to "Chemist," c/o Mr. Wm. Foggitt, Market Place, Thirsk.

**WANTED,** a qualified and an unqualified Assistant. Apply, personally, Lewis & Burrows' Drug Stores, Limited, 22 and 24 Great Portland Street, London, W.

#### BATTERSEA PROVIDENT DISPENSARY.

**ASSISTANT** Dispenser wanted at once for the above institution; qualified, and not over 30 years; will have to live near; salary £90 per annum. Apply by letter to Hon. Sec. 185 High Street, Battersea, S.W.

#### DEVON AND EXETER HOSPITAL, EXETER.

**WANTED,** a Dispenser; salary £100 per annum, rising £5 every two years, to £120. Applicants must be duly qualified by the Pharmaceutical Society. Mid-day meal provided. Applications, with testimonials, to be sent in, addressed to the President, on or before Tuesday, 31st inst. By Order, ALBERT E. BOYCE, Secretary.

#### HOLLOWAY AND NORTH ISLINGTON DISPENSARY.

**REQUIRE**, temporarily, part-time Dispenser, who must be well recommended; duties to commence February 8; if found suitable, permanent part-time employment, with rooms, might be given later. Apply to Resident Medical Officer, Palmer Place, Holloway Road, N., before 11 A.M., or by letter.

#### ROTHERHAM HOSPITAL AND DISPENSARY.

**WANTED,** a Dispenser, for the above Institution; candidates must be Assistants of the Society of Apothecaries or qualified under the Pharmacy Act, 1868.

The salary is £70, payable monthly; single man preferred. Applications, stating age, qualifications, with copies of recent testimonials, to be sent to the House Surgeon.

#### WHOLESALE.

**ADVERTISERS** have a vacancy in their Chemical Department for a trained Chemist, to assist in the production of Fine Chemicals. Address reply, with full particulars as to age, experience, and salary required, to "Chemicals," Box 3,493, Sell's Advertising Offices, London.

**A WHOLESALE** firm in Scotland requires a smart, hard-working, and competent young man as Wet-room Assistant; he would have a lad under him whom he would require to be able to control. Applicants must state distinctly age, experience, and wages required, and must give references, to 239/19, Office of this Paper.

**AN** old-established firm of Spice, Drug, and Seed Grinders and Merchants, who sell several Specialities, require a Traveller to call upon Veterinary Surgeons and Chemists; preference given to one who has been upon the road, and can introduce some connection. Apply, by letter, to N. S. (159/59), Office of this Paper.

**DRUGGISTS' SUNDRIES.**—Wanted, a smart representative, to reside in Liverpool and work the neighbourhood. State age and qualifications to 159/32, Office of this Paper.

**JUNIOR** Invoice Clerk wanted by London Wholesale and Export Druggists; one who has filled a similar position preferred. Apply, by letter, to 161/42, Office of this Paper.

**LABORATORY.**—An intelligent young man required who has had experience in a wholesale laboratory, where chemicals as well as drugs have been handled. Apply, stating age, experience, and wages expected, to "Wholesale," c/o Dixon's Advertising Offices, 195 Oxford Street, W.

**LADY PHARMACIST** (qualified), to superintend in the Packing department, handling of preparations containing poisons. Applicants will please state age, experience, and salary required, to "Poison," c/o Messrs. Street & Co., 30 Cornhill, E.C.

**SMART,** well-educated gentleman, required to call upon dentists, doctors, and chemists; must be young and pushing. Apply, "Prospects," 255/8, Office of this Paper.

**TRAVELLER** wanted, for large old-established Surgical India-rubber Factory; must be energetic, have experience, and only those with first-class references will be entertained. 254/8, Office of this Paper.

**WANTED,** a young man, about 30 years, to put up net stock and assist in packing; also to take charge of a small Wholesale Drysaltery business; wages 30s. Enclose photo and References, to "Mutiny" (160/41), Office of this Paper.

**WANTED,** a young man as Junior Assistant in Surgical Instrument Department; one who has some knowledge of the business preferred. Apply, stating experience and salary required, to J. O. (161/13), Office of this Paper.

**WHOLESALE** Drug Trade.—Junior Invoice Clerk wanted; must be quick at figures and write a good hand. Only those accustomed to the trade, and Englishmen, need apply, by letter, to "Chemical," 161/35, Office of this Paper.

**WANTED,** Chief Chemist and Manager of Works, by a leading London firm of Manufacturing Chemists, employing several hundred people. The qualifications necessary for the position are high and well-grounded scientific knowledge and attainments; good practical experience in carrying out Manufacturing Processes; exceptional powers of organisation and administration, tact, good judgment; capability to direct and control scientific workers engaged in the manufacture of Fine Medicinal Chemicals and Pharmaceutical Products; a gentleman with University training and degrees preferred; the position commands a liberal salary; replies will be treated in the strictest confidence, if so desired. Address, stating age, qualifications, and experience, to "Manager,"



# SITUATIONS WANTED

1s for 12 words or less; 6d. for every 6 words beyond.

## RETAIL.

**PART-TIME**, or full time with short hours. Davis, 16 West Square, S.E.

**BRANCH** Manager; 30; qualified; married. 259 18. Office of this Paper.

**QUALIFIED**; 25; tall; London preferred. A. B. (252/35), Office of this Paper.

**LOCUM-TENENS**; an excellent record. P., 11 Tremadoc Road, Olapham, S.W.

**QUALIFIED** Assistant; disengaged; 8 years' experience. B., 33 High Street, Buxton.

**ASSISTANT**; 26; 8 years' experience; disengaged. Lewis, Tyharry, Dingestow, Mon.

**ASSISTANT** or Locum; aged 30; experienced; Extractor. 32 Laurel Grove, Penge, S.E.

**QUALIFIED**; London or near; disengaged February 1. (258/28) Office of this Paper.

**MORNING** Engagement for six weeks; London; immediate. Lenton, Olifton, Biggleswade.

**PART-TIME**; London; 22; Chemist or Surgeon. "Student," 76 Gower Street, W.C.

**ASSISTANT**; 25; stores preferred; unqualified. Address, S., 4 Ashley Terrace, Weston, Bath.

**QUALIFIED**; 26; town preferred; London experience. S., 132 Kennington Park Road.

**ASSISTANT**; 26; tall; 2 years' present situation. H., Lawrence & Co., New Wandsworth.

**DISENGAGED**; unqualified; 9½ years' experience. "Graeme," 47 Station Road, Red Hill.

**PART-TIME**; 33; outdoors preferred; disengaged. "Locum," 24 York Road, Battersea, S.W.

**BRANCH** Manager or Locum; qualified; disengaged. "Chemist," 40 Eccleston Road, Ealing, W.

**QUALIFIED**; 22½; 8 years' good-class experience. Lofthouse, 252 Langsett Road, Sheffield.

**MANAGER**; good all-round experience; married; qualified. "Tall" (256/29), Office of this Paper.

**ASSISTANT**; 27; 5 ft. 9 in.; 12 years' Mixed experience. 47 Bickley Street, Moss Side, Manchester.

**EVENINGS**, 2 or 3 weekly; qualified; terms moderate. Q., 142 Kentish Town Road, N.W.

**QUALIFIED** Dispenser or Branch Manager; London; outdoors. R., 39 Museum Street, Bloomsbury.

**MANCHESTER** or London; part-time; Major student. Thauet Villa, Clay Cross, Chesterfield.

**QUALIFIED**; 23; good experience; North preferred. "Chemist," 24 Old Chapel Street, Blackburn.

**ASSISTANT**; 23; good experience and references. "Statim," 39 Devonport Road, Shepherd's Bush.

**PART-TIME**; 28; disengaged after 2 P.M.; tall; 13 years' reference. Anstey, 20 Royal Exchange, London.

**MANAGER** qualified; first-class City experience; good address. "Chemist" (258/3), Office of this Paper.

**MANAGER**; 28; qualified; married, no family; disengaged. "Extractor," 12 Stockwell Road, S.W.

**QUALIFIED** Branch Manager; Extractor; experienced; house preferred. C., 87 Brayard Road, Peckham.

**QUALIFIED**; aged 25; outdoors preferred; 11 years' experience (London 3 years). Wendon, Ivybridge.

**QUALIFIED**; morning, afternoon, or evening employment, for about three weeks. 258/11, Office of this Paper.

**ASSISTANT**, with view to succession or Partnership; qualified. "Bromide" (256/21), Office of this Paper.

**JUNIOR**; 7 years' experience; knowledge of Photography; 3 years' reference. X, Y, Z., 68 High Road, Balham, S.W.

**LOCUM**; qualified; disengaged; London preferred. Address, "Alumina," The Polytechnic, Regent Street, W.

**PART-TIME**; London, N.W. preferred; good Dispenser; knowledge Photography. "Saponin," Moorby, Boston.

**ASSISTANT**; 24; disengaged; Store and Photographic experience; outdoors. "Beta" (255/9), Office of this Paper.

**QUALIFIED**; high-class Dispensing experience; tall; disengaged. "Trional," The Polytechnic, Regent Street, W.

**AS LOCUM** Tenens; 37 years of age; highest references; moderate terms. "Tenax" (258/30) Office of this Paper.

**UNQUALIFIED**; 8 years' good experience; Birmingham or district. 199 St. Vincent Street, Ladywood, Birmingham.

**MANAGER** or Senior; first-class experience; excellent references. Newman, 5 Buckley Road, Brondesbury, London.

**MANAGER** or Dispenser; age 35; 2½ years' reference; Hall certificate. X, Y, Z., 68 High Road, Balham, S.W.

**ASSISTANT**; Manchester district; time for study; good references; now disengaged. B., 56 Central Road, West Didsbury.

**ASSISTANT**; 29; Gentlemanly; good references; disengaged Tuesdays and Fridays. H., 9 Elm Road, Forest Gate, E.

**MANAGER**, Assistant, or Locum; all-round London experience; excellent references. D., James, Chemist, Tottenham.

**JUNIOR** in Dispensing business; South preferred; 22½; 5 years' experience; 5 ft. 10½ in. Reason, 4 Victoria Road, Brighton.

**ASSISTANT**; 22; 5 ft. 7 in.; 6½ years' experience; knowledge of Photography. "Phion," 52 Spring Gardens, Doncaster.

**ASSISTANT**; 27; unqualified; good West-end experience; disengaged February 13. A. A., 136 Great Portland Street, W.

**PHARMACEUTICAL** Chemist; 22; good reference; knowledge Photography. "Chemicus," 9 Station Road, Workington.

**MANAGER**, for Company, Branch, or Widow; qualified; good experience in all branches. Apply, 255/21, Office of this Paper.

**IMPROVER**; 4 years at Drug-counter, 7 months Dispensing; object, first-class experience, not salary. 254/39, Office of this Paper.

**JUNIOR**; 20; height 5 ft. 10 in.; Photography; good references. Full particulars, "Exalgine," 29 Sydenham Road, Ootham, Bristol.

**MANAGER**; shortly disengaged; Extractor, Prescriber; married; town or country. "Ebeana" (258/39), Office of this Paper.

**JUNIOR**; 20½; accurate Dispenser; time for classes; abstainer; London or Manchester. "Statim" (251/20), Office of this Paper.

**QUALIFIED** Assistant; 26; North of England preferred; good references. Marsden, 1 Lumley Terrace, Savile Town, Dewsbury.

**DOCTOR'S** Dispenser or small branch; first-class experience home and abroad; 30; married. Oarrington, 151 North End, Croydon, Surrey.

**JUNIOR**; 21½; 6 years' experience; good experience in Dispensing; London or near; disengaged February 15. Jackson, c/o Padwick, Redhill.

**BRANCH** Manager or otherwise; qualified; 29; tall; good experience. "Chemist," c/o Mrs. Carmichael, Queen's Road, Clarendon Park, Leicester.

**PHARMACEUTICAL** Chemist; 23; tall; disengaged; London and country experience; good references. H. L. Smith, Manor House, Kettering.

**CAPABLE** Assistant; successful counterman; extractor; prescriber; 25; London (outdoors preferred); abstainer. Landor Road Post Office, S.W.

**QUALIFIED**; 23½; 8 years' excellent experience; London or seaside preferred; brisk business. "Assistant," 59 Hereford Road, Baywater, London.

**ASSISTANT**; 25; 5 ft. 9 in.; 10 years good all-round experience; undeniable references; outdoors preferred. Ohas, Lane, High Street, Uppingham.

**SMART** gentlemanly Junior; 20½; disengaged end February; Light Retail and Dispensing; good experience. "Oaro" (255/25), Office of this Paper.

**BRIGHTON** or vicinity.—Manager or Senior; 29; qualified; disengaged; highest references; outdoors preferred. S., 40 Cleveland Road, Brighton.

**DISENGAGED**; unqualified; 24; 8 years' varied; where one or more, or out, preferred; not London. "Willing," 37 Gladstone Street, Southwark, S.E.

**LOCUM** or Temporary Assistant; Major; aged 27; excellent Dispensing and Retail experience; disengaged. 33 Mount Pleasant, Tunbridge Wells.



**A**S Manager; with or without view to succession; 12 years' London and Provincial experience; outdoors preferred. "Borax," 16 Market Street, Walton.

**FEBRUARY**: Assistant; Northern Counties, Newcastle or district, preferred; 22; unqualified; good references. State hours, Banner, Vilette Road, Sunderland.

**BRANCH** Manager (or Assistant, outdoors); 27; unqualified; abstainer; Photography; references; no objection to Isle of Man. 253 19, Office of this Paper.

**A**S Locum, until 3rd February; qualified; accustomed to management; first-class experience and reference; speaks French; aged 30. E., 682 High Road, Tottenham, N.

**JUNIOR**; disengaged February 20; knowledge of new Pharmacopoeia; indoors; London W. preferred; good references. W. H. Hurn, South Heigham Pharmacy, Norwich.

**BRANCH** Manager, Assistant, Surgeon's Dispenser; outdoors; London preferred; 40; unqualified; steady; Prescriber, Extractor; disengaged. 45 Grange Road, Leyton.

**QUALIFIED**; disengaged early February; as Manager or Senior; good Store experience; references; London district. Address, "Scot" (255/19), Office of this Paper.

**DENTISTRY**.—Qualified Assistant desires to learn Dentistry; experienced Dispenser, Extractor, and Prescriber; moderate terms. "Minor," 25 Park Street, Islington, N.

**ASSISTANT**; qualified; 25; tall; good-class Provincial, country, and West-end experience; outdoors preferred; disengaged. "Chemist," Pasture Cottage, Malton, Yorks.

**BRANCH** Manager, or position of responsibility; qualified; 24; 5 ft. 10 in.; first-class Dispensing and all-round experience; abstainer. "Chemist," 41 Talbot Road, Tottenham.

**JUNIOR**; aged 21; height 5 ft. 8 in.; 5 years' good experience; disengaged February 1st; Manchester or district preferred. Address, J. H., 24 Albert Park Road, Lower Broughton, Manchester.

**BRANCH** Manager; qualified; competent; reliable; varied experience; middle age; married, no family; a permanency desired, or temporary till suited. "Nemo," 49 Roundhill Crescent, Brighton.

**ASSISTANT**; good experience first-class Retail and Dispensing, Store trade and Photography; Prescriber and Extractor; Bristol or Clifton, and outdoors preferred; references; disengaged. S. Ward, 6 Meridian Road, Clifton, Bristol.

**WANTED**, situation as Manager, or similar position of trust; Minor and D.S.A. qualifications; exceptionally satisfactory references; 12 years' experience; age 27; a permanency desired; Midland town preferred. Apply, J. A. Bayes, The Pharmacy, Woburn Sands, Beds.

## WHOLESALE.

**A**S Clerk; several years' experience; now disengaged. 252/40, Office of this Paper.

**ADVERTISER** desires to Travel; Drugs or Sundries; North of England. Apply, 255/28, Office of this Paper.

**DUBLIN** Druggist would be glad to hear of good Agency; Dublin and London reference. Apply, 250/28, Office of this Paper.

**TRAVELLER**; medical gentleman (unqualified) desires to represent Drug house or Surgical Instruments; references. 255/23, Office of this Paper.

**GENTLEMAN**, Chemist, open to commission; town or country; good connection. Apply, "Chemist," 19 Marney Road, Olapham Common, S.W.

**TRAVELLER**; Chemist; good connection Midlands and West; also London; City experience. Apply, "Chemist," 78 Cathles Road, Balham Hill, S.W.

**A**S Traveller; aged 28; 12 years' Retail experience; or could accept good commission; some Wholesale experience. J. D., 21 Danehurst Street, Fulham, S.W.

**TRAVELLER**; qualified Chemist; first-class connection among Chemists and Doctors in the six Northern counties; highest references. 256/23, Office of this Paper.

**REPRESENTATIVE**, calling on principal Chemists and Druggists in Ireland, is open for another good house on commission. "Sundries," Osborne Hotel, Belfast.

**TRAVELLER**, qualified Chemist (27), desires engagement with good Drugs, Sundries, or Photographic firm; good appearance and address. 254/35, Office of this Paper.

**PHARMACEUTICAL** Chemist (26), thorough knowledge of Retail trade, desires to represent good house, or situation in manufacturing Laboratory. Address, 253/21, Office of this Paper.

**WHOLESALE**.—Young man, aged 24, as Bookkeeper in Wholesale Druggist's or Manufacturer; corresponds in German; good references. Address, E. E. (228/15), Office of this Paper.

**YOUNG** gentleman, Doctor's Son, 21, smart, experienced in Drugs, 3 years' hospital training, would like to travel for Wholesale firm of Druggists. Bailey, 66 Carlton Road, Nottingham.

**ADVERTISER**, with 3½ years' practical Retail experience in Dispensing and Manufacturing, seeks engagement in the Laboratory of a leading City house. Hind, Lansdowne Road, Tottenham.

**COLONIAL** Traveller.—A business gentleman, shortly going out to colonies, wishes to represent first-class firm or firms on commission or other terms. Write, H. F. C., c/o Willing's, 162 Piccadilly, W.

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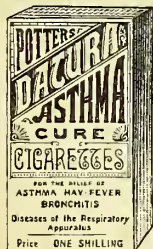
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6 GREAT TURNSTILE, HIGH HOLBORN, LONDON, W.C.

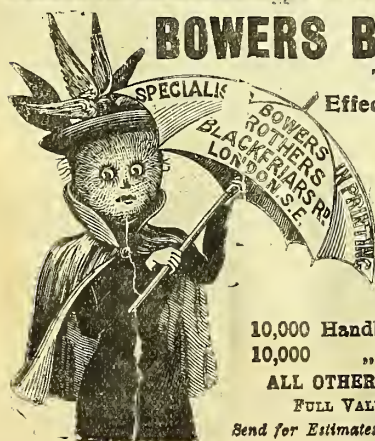
WRITE FOR SAMPLES AND PRICES OF OUR

PICTORIAL AND ORDINARY COUNTER BILLS  
ON WHITE AND COLOURED PAPERS:

## FOLDING CARDBOARD BOXES

PLAIN OR PRINTED IN CHOICE DESIGNS FOR PUTTING UP SPECIALITIES.

Price Lists, Pamphlets, Circulars, Billheads, Memorandums, Cards, and all kinds of Printing and Stationery required by Chemists, at most Moderate Prices.



## BOWERS BROTHERS,

The Chemists'  
Effective Printers and  
Advertisement  
Designers,  
Invite Correspondence.

NOVEL DESIGNS,  
GOOD WORK,  
LOW PRICES.

10,000 Handbills; 17/6 9 x 5½  
10,000 " 11/- 7½ x 5

ALL OTHERS EQUALLY LOW.

FULL VALUE IN ALL LINES.

Send for Estimates before ordering elsewhere.

## FRANCIS NEWBERY & SONS

DRUGGISTS' SUNDRIESMEN,

1 & 3 KING EDWARD STREET, LONDON, E.C.

## NEW STAINED DRESSING COMBS

CARDED.

			s.	d.
Small.	Assorted colours.	Per 6 combs ...	2	3
	1/- do. large	" " ...	4	3
	1/- do. rakes	" " ...	4	0

Above Combs are very superior, and sell well at sight.

NEW 1/6 BRONCHITIS KETTLES,  
Per dozen, 10/-.

## ST. PAUL'S PERFUMES

"VIOLET SERIES."

Riviera, Russian, Parma, } Each bottle with  
White. } appropriate flower.  
Packed 1 doz. of each in neat boxes ... per dozen, 2/-

Chemists who have not yet seen this series are invited to order 1 dozen of each as a trial, and we doubt not that a repeat order for 1 gross assorted will follow very quickly.

Proprietors:

F. NEWBERY & SONS.

## B. LANGWISCH Ncht., HAMBURG,

MANUFACTURER OF REALLY INOFFENSIVE

## COSMETICS

For the Theatrical Profession.

UNEXCELLED GREASE PAINTS,

In 80 different shades.

Fett Powder, Rouges, Eyebrow Pencils, Water Cosmetics.

LANGWISCH'S JAYA RICE POWDER,

In 3 shades—Naturelle, Blanche, Râchel.

ILLUSTRATED PRICE LISTS from the SOLE AGENTS—

Messrs. B. A. GRAUTOFF & CO., 3 Jeffrey Square, St. Mary  
Axe, London, E.C.



*The Leading Brand of Photographic Plates is the*

ENORMOUS  
Amateur  
Sale.

# CADETT

Annual  
Sale,  
MILLIONS.

**LARGEST HOME SALE.**

QUICK PRINTING

IN MAUVE,  
PINK,  
WHITE.

# P.O.P.

THE BEST  
YET  
INTRODUCED.

**Popular Prices.**

**Now Ready.**

**Cut Sizes and Rolls.**

Being stocked by every Chemist. Obtained in large or small quantities, either direct of us or of any of the Wholesale Druggists, with Manufacturers' Trade Discount.

DIRECT FROM WORKS { Deliveries free (10s. and over) to Carriers in London.  
£5 net parcels carriage paid to any part of England  
and to most towns in Scotland and Ireland.

**ADVERTISING MATTER, SHOW CARDS, PRICE LISTS, ETC., POST FREE.**

**CADETT & NEALL, Ltd., Sole Manufacturers, ASHTEAD, SURREY, ENGLAND.**

**ALL DEALERS SHOULD STOCK**

## LOCKYER'S

# HYDROQUINONE DEVELOPER

For terms, &c., write, 87 EVELYN STREET, DEPTFORD, S.E.

**READ THIS TESTIMONIAL.**

"MR. J. E. LOCKYER.

"OSWESTRY, March 12th, 1898.

"DEAR SIR,—Perhaps you would like to know that I won the (Thirty Guinea) FIRST PRIZE for Snap Shot in the Eastman Co.'s Competition last Autumn, and developed the Films with your Developer, and toned the Prints with your Toning Solution.

"Yours truly, E. B. OWEN."



# WARRICK

## MAKERS of FLEXIBLE CAPSULES.

Best Quality Envelopes. Best Quality Ingredients.

PORTPOOL LANE, LONDON, E.C.

### BROTHERS.

TO WHOLESALE & EXPORT CHEMISTS.

## Price's Patent Candle Company Ltd.

BELMONT WORKS, BATTERSEA, LONDON, S.W.,

ARE PREPARED TO QUOTE FOR

**OILS.** Neatsfoot, Lard, Animal, Olive, Cooking, Castor, Cod, Sperm, Coconut, Palm, etc.

Water White Mineral Oil, free from Sulphur (Paraffinum Liquidum B.P.)

**LARDS.** Prepared, Benzoated, Indurated.

**WAXES.** Beeswax, White Wax, Ceresine, Paraffin Wax, Japan Wax, Spermaceti.

**PETROLEUM JELLY** "Ceratine" White or Yellow, Plain or Scented.

Samples and Price Lists on Application.

# SCOTT'S EMULSION

of Cod-liver Oil with Hypophosphites of Lime and Soda has for over twenty years been endorsed and prescribed by Physicians in all parts of the world.

It is the STANDARD EMULSION, and can



REGISTERED TRADE MARK.

always be relied upon as being the MOST PERFECT, PERMANENT, and PALATABLE Emulsion in the market.

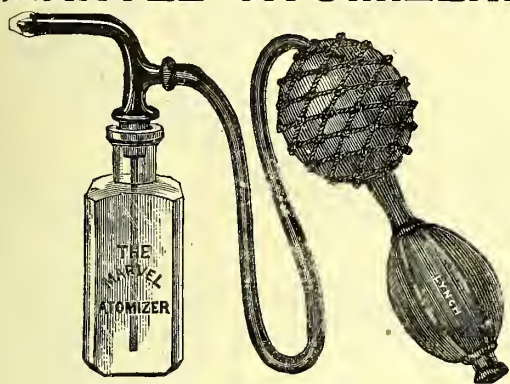
Scott's Emulsion does not separate, and keeps well in all climates.

SCOTT & BOWNE, Ltd., 95-98 Great Saffron Hill, London, E.C.



# LYNCH'S

## MARVEL ATOMIZER.



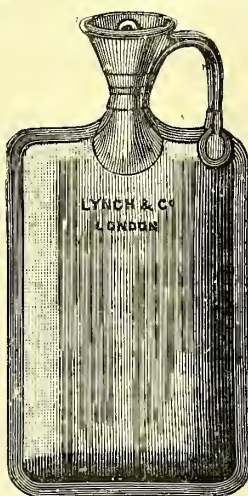
14/6 per doz.

Less usual Discount.

## WATER BOTTLES.

"ENGLISH."

## NEW PATTERN.



6 x 12 each	---	3/11	10 x 12 each	---	5/6
8 x 10 "	---	4/5	10 x 14 "	---	6/3
8 x 12 "	---	5/-	10 x 16 "	---	6/7
8 x 14 "	---	5/6	12 x 14 "	---	7/2

LESS USUAL DISCOUNT.

We would suggest to intending buyers to send for a sample bottle and compare quality and price before laying in stock for the coming season.

## PATENT SAFETY ENEMA.

60/- doz., less Discount.



No Possibility of Injecting Air. Always ready for use.  
Forms its own Reservoir. All parts are enclosed in Box.  
Will last many Years.

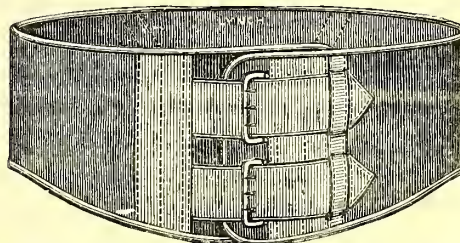
The above illustration represents an Enema which is arranged so that the box will form the reservoir for the fluid to be injected. By being used in this way any possibility of injecting air is avoided, owing to the fact that the suction end of Enema is screwed into bottom of reservoir. It is light and portable, and most suitable for travelling. The Enema is made of the finest quality rubber in one continuous length, and will last for many years with ordinary usage; it is also fitted with our patent non-corrosive glass valves. The reservoir which forms the box is made of iron, enamelled inside and out.

Fitted with improved Stopcock, as suggested by

W. D. JEFFERSON, M.R.C.S.

## LYNCH'S BODY BELTS.

MARVELLOUS VALUE.



3012. Belts, Gents' Body, in RED WEB, to buckle, strong and well finished ... .. 12/-  
3015. Belts, Gents' Body, in WHITE WEB, to buckle, superior finish ... .. 16/-  
3016. Belts, Gents' Body, in GREY NATURAL WEB, to buckle, elegantly finished with leather fittings ... .. 24/-

LESS USUAL DISCOUNT.

## LYNCH'S COMBINATION INHALER, FOR MOUTH AND NOSE.

(REGISTERED.)



To be used for Inhalations of Iodine, Terebene, Eucalypti, &c., for Sore Throats, Bronchial Affections, Nasal Catarrh, Hay Fever, &c.  
Complete in handsome maroon box, richly gilt, with Bottle for Medicament, and Cotton Wool.

8/6 per dozen, less usual Discount.

# LYNCH & CO., LTD., LONDON.



TELEGRAPHIC ADDRESS "YALCRAB" LONDON.



**BARCLAY & SONS**

WAREHOUSE & SHOW-ROOMS LIMITED. ESTABLISHED UPWARDS OF A CENTURY.

**95 FARRINGDON ST LONDON E.C.**

OVER **80%** PROFIT  
ON  
SELLING PRICE.



**100 PENNY BOOKS**  
— OF —  
**BEST TOILET PAPER**  
For 2/-  
1,000 ditto for 15/-

## COD LIVER OIL.

(Finest Norwegian.) Non-Freezing.

1/4-pint	...	...	...	...	at	per dozen	4/-
1/2-pint	...	...	...	...	at	"	6/6
1 pint	...	...	...	...	at	"	12/-

## INDIARUBBER HOT-WATER BOTTLES.

Size 10 x 8	...	...	...	...	each	4/-
" 12 x 6	...	...	...	...	"	3/4
" 12 x 8	...	...	...	...	"	4/3
" 12 x 10	...	...	...	...	"	5/-
" 14 x 8	...	...	...	...	"	5/-
" 14 x 10	...	...	...	...	"	5/6
" 16 x 10	...	...	...	...	"	6/-

## LINSEED, LIQUORICE

AND

## CHLORODYNE LOZENGES.

In 7-lb. Glass Top Boxes, at 9d. per lb.

In 7-lb. Handsome Show Tins, at 9½d. per lb.

## CHEST PROTECTORS.

Scarlet Felt, Best quality—

	Nos. 1	2	3	4	5	6	
SINGLE.	5/6	7/6	9/6	11/6	15/6	20/-	per doz.
DOUBLE.	12/-	16/-	21/-	26/-	34/-	42/-	"

## BRONCHITIS KETTLES.

Fluid Capacity, 2½ Pints. Per doz., 8/6.

## POPULAR VAPORIZERS.

Per doz., 3/9.

## CIGARS, BORNEO.

LA FLOR DE BRANDIGA.—These Cigars are of choice flavour, and have all the finish and appearance of Havana goods costing double the price.

Perfectos	...	50 in a box	...	per 100	15/6
Cabinets	...	50	"	"	16/6
"	...	25	"	"	18/-
Non Plus Ultra	...	50	"	"	17/6
"	...	25	"	"	19/-



Telegraphic Address—CHEMICUS LONDON.

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**ADVERTISING SPECIALITIES**  
Corsean, J. R.  
Special Advertising Agency

**AERATED & MINERALS**  
Aerators, Lim.  
Apolinaris Co.  
Barnett & Foster  
Chemists' Aerated Mineral Waters Association Lim.  
Ellis & Son (Rutbin)  
Idrie & Co., Lim.  
Ingram & Hoyle, Lim.  
Jewsbury & Brown  
Kronthal Water Co., Lim.  
Mills & Co. (Bourne)  
Robach Springs, Lim.  
Rose, W. A., & Sons, Lim.  
Salutaris Water Co.  
Smith, W. E., & Co.  
Vite-Ore Co., Lim.

**AERATED PLANT**  
(See EFFERONS AND ESSENCES)  
Barnett & Foster  
Bertie-Smith & Co.  
Tyler, Hayward & Co.  
Volcanic Aeration Co.

**AGENCIES ABROAD**  
Abid, A., & Co.  
Jenck, E. Owen, & Co., Lim.  
Remphorne, Prosser & Co.  
Lennon, G. B., & Co. (N.Z.)  
Peake, Allen & Co.  
Smart & Copley  
Smith & Sons  
Taylor & Colledge

**ALMANACS**  
Ford, Shapland & Co.  
Key Bros.  
Silverlock, H.  
Townsend, J., & Son

**AMMONIA**  
May & Baker, Lim.  
Scrubb & Co.  
White, A., & Sons  
Woodcock's Ammonia Team Co., Lim.

**ANNATTO**  
Baker, J. W.

**APPARATUS**  
Bennett, Sons & Shears  
Brewster, Smith & Co.  
Peroni, A.  
Southall Bros. & Barclay  
Woolley, J., Sons & Co.

**BATH SALTS**  
Tidman & Son, Lim. (Sea Salt)

**BEEWAX**  
Bowdlear, W. H., & Co.  
Evans, Sons & Co.  
Leonard, T.  
Lüneburger Wachsbleiche

**BICARE, SODA**  
Brunner, Mond & Co., Lim.  
Howards & Sons  
May & Baker, Lim.

**BISMUTH PREP.**  
Howells & Sons  
Howards & Sons  
May & Baker, Lim.  
Tyler, T., & Co.  
White, Alfred, & Son

**BOOKS, &c.**  
Churchill, J. & A.  
Mutters, Dr., Anal. Chem.  
Southall Bros. & Barclay  
Squire's "Companion"

**BOTTLES, POTS, &c.**  
Barnett & Foster  
Barrett, R. H.  
Bremitts, Lim.  
Hearns, Lim.  
Issacs & Co. | Kilner Bros.  
Lynch & Co., Lim.  
Maw, S., Son & Thompson  
Poths, H., & Co.  
Southall Bros. & Barclay  
Superdum Stopper Co., Lim.  
Toogood, W. | Youlson, E.

**BRUSHES**  
Addis, R., & Son  
Evans, Sons & Co.  
Hovenden & Sons  
Kent, G. B., & Sons

**BOXES**  
Austin & Co. (Cardboard)  
Evans, Sons & Co.  
Glover, C. H., & Co.  
Kent, G. B., & Son  
Patent stopper, Box, and  
Stamping Co., Lim. (ain)  
Robinson & Sons  
Tinsplate Decorating Co.

**BUNSEN BURNERS**  
Berend & Co.

**BUTTER COLOUR, &c.**  
Baker, J. W.  
Crawshaw, E., & Co.

**CACHETS**  
Christy, T., & Co.  
Cooper & Co.  
Sangers, J., & Son

**CACHOUS**  
Allen & Hanburys, Lim.  
Bleasdale & Co., Lim.  
Brager, L.  
Carmichael, M. W.  
Denouah, J.  
Jackson, T.  
Lloyd, T. H., & Co.  
Malmes & Co. | Sen Sen Co.  
Warrick Bros.

**CAMPFHO**  
Howards & Sons  
May & Baker, Lim.

**CAPSULES**  
Allen & Hanburys, Lim.  
Denouah, Jules  
Duncan, Flockhart & Co.  
Evans, Lescher & Webb  
Lloyd, T. Howard, & Co.  
Louthouse & Salmter  
Mason, C. E., & Co.  
Robertson, & K. (Moulds)  
Warrick Bros.

**CASCARA SAGRADA**  
Duncan, Flockhart & Co.  
Evans, Lescher & Webb  
Ferris & Co.  
Farle Manufacturing Co., Lim.  
Harker, Stagg & Morgan  
Parke, Davis & Co.

**CARBOLIC ACID**  
Calvert & Co.  
Stevenson, H. E., & Co.

**CARBONIC ACID GAS**  
Carbonic Acid Gas Co.

**CASTOR OIL**  
Hull Oil Mfg. Co., Lim.  
Love, H. F., & Co.  
United British Castor Oil Co., Lim.

**CHALK, PRECIP.**  
Levermore, Aug., & Co.

**CHECK TILLS**  
Gledhill, G. H., & Sons, Lim.  
O'Brien, T.

**CHEMICALS**  
Boehm, Fredk.  
Boehringer, C. F., & Sohne  
Brunner, Mond & Co., Lim.  
Burgoyne, Burgess & Co.  
Davy, Hill & Son, Yates & Hicks  
Evans, Lescher & Webb  
Evans, Sons & Co.  
Goodall, Backhouse & Co.  
Howards & Sons (Pharm.),  
Kirkpatrick, Barr & Guthrie  
Louthouse & Salmter  
Love, H. F., & Co.  
Macfarlan, J. F., & Co.  
May & Baker, Lim.  
Merck, E.  
Sanitas Co., Lim.  
Scottish Acid & Alkali Co., Ltd.  
Smith, B. A., & Co.  
Smith, T. H., & Co.  
Stevenson, H. E., & Co.  
Tyke & Jung  
Tyler, T., & Co., Lim.  
Voss, Walter, & Co.  
Washington Chemical Co.  
White, A., & Sons

**CHLORIDE OF LIME**  
Government Sanitary Co.  
Rebden, W. C.  
National Chemical Co.  
Kneale, C. & Co.

**CHEST PROTECTOR**  
Liverpool Patent Lint Co.  
Maw, S., Son & Thompson

**CHLORODYNE**  
Lavenport (Browne's)

**CHLOROFORM**  
Luncan, Flockhart & Co.  
Macfarlan, J. F., & Co.  
Smith, R. H., & Co.

**COCAINE-HYDRO.**  
Howards & Sons

**COCA WINE**  
Burrough, J.  
Evans, Lescher & Webb  
French Hygienic Society  
Holloway Wine Co., Lim.  
Stephen Smith & Co., Ltd. (Hall's)  
White, S. B.  
Wilcox & Co., Lim.  
Wright, Layman & Umrey

**COCA & CHOCOLAT**  
Cadbury Bros.  
Ferru Cocoa  
Fry & Sons  
Van Houten  
Vi Cocoa (Dr. Tibbles')

**COD-LIVER OIL**  
Allen & Hanburys  
Burroughs, Wellcome & Co.  
Cutburt, R.  
Evans, Lescher & Webb  
Evans, Sons & Co.  
Harker, Stagg & Morgan  
Kemp & Son  
Linton, Hubbard & Co.  
Louthouse & Salmter  
McIlain's Emulsion Co., Lim.  
Randall & Son  
Smith, T. H., & Co.  
Spratt's Patent (Dog Cakes)  
Scott's Emulsion  
Southall Bros. & Barclay  
Stevenson, H. E., & Co.  
Wright, Layman & Umrey

**COFFEE (Extract)**  
Unile Patents Co.



**COLLAPSIBLE TUBES**Marshall Lim.  
Vigo, Jules, et Cie.**COMP. MEDICINES**Allen & Hanbury  
Burroughs, Wellcome & Co.  
Leo & Co.  
Lloyd, T. Howard, & Co.  
Parke, Davis & Co.**CONCENT. LIQUORS**Balas Bros. & Co.  
Fletcher, Fletcher & Co.  
Lloyd, T. Howard, & Co.  
Robinson, B.**CONFECTIONERY**Gibson & Sons  
Guest, T., & Co.  
Hillaby, Lim.**CORKS**Ellis, W., & Co.  
Ringrose & Cobb**CORN CURES**

Gardner, C. | Potter &amp; Clarke

**CRUSHED LINSEED**Mumford, G. S.  
Nell, R. & J.**DENTIFRICES, &c.**Bayard, Sons & Bayard  
Beecham, T.  
Beecham, T., & Son  
Hovenden & Sons  
Jewsbury & Brown  
Mason, C. E., & Co.  
Ollapell, Co.  
Stevens, P. L. M.  
Stanton, O., & Co.  
Woods, W. (Arecas Nut)**DENTISTRY**Barker, F. H.  
Browning, A. J., Lim.  
Fentiman, A. G.  
Fentiman & Co.  
Spencer & Son**DISINFECTANTS**Calvert, B. C. & Co.  
Chinosol Hygienic Co., Lim.  
Dussek Bros.  
Fletcher Bros. & Co.  
Formalin Hygienic Co., Lim.  
Government Sanitary Co.  
Hobden, W. W. "Izal"  
Jeyes Sanitary Compounds Co.  
Kay Bros., Lim.  
Kuhn, B. (Chinosol, Kresochine)  
Mackey, Mackey & Co.  
Major & Co., Lim.  
May & Baker, Lim.  
National Chemical Co.  
Sanitas Co., Lim.  
Steele, J. C., & Co.  
Tomlinson & Hayward  
Tyrer, T., & Co., Lim.  
United Alkali Co., Lim.**DCG MEDICINES**Lloyd, T. Howard, & Co.  
Spratt's Patent, Lim.**DRUGGISTS' SUNDRS.**Ayrton & Saunders  
Barclay & Sons, Lim.  
Bleasdale & Co., Lim.  
Burge, Warren & Dudley  
Dailley & Wilson  
Dent, C. S., & Co.  
Evans, Lescher & Webb  
Evans, Sons & Co. (Savars)  
Nordham, W. B., & Sons, Lim.  
Hovenden & Sons  
Key Bros., Lim.  
"Leaf" Brand Hat Reviver  
Marshall, Lim.  
Maw, S., Son, & Thompson  
May, Roberts & Co.  
Newbery, F., & Sons  
Quelch, H. C.  
Roberts & Sheppey  
Sanger & Sons | Schutz & Co.  
Southall Bros. & Barclay  
Tidman & Sons | Togood, W.  
Wyley, S., Lim.**DRUG GRINDERS**Allen, S., & Sons  
Nell, R. & J., & Co., Lim.**DRUGS**Bleasdale & Co., Lim.  
Lothouse & Saltmer  
Love, H. F., & Co.  
Merck, E.  
Nell, R. & J., & Co., Lim. (and Spices)  
Oppenheimer, Son & Co.  
Stevenson, H. E., & Co.  
Wyley, S., Lim.**DYES**Crawshaw, E., & Co.  
Ischem Household Dye Co.  
Maypole Soap Co., Lim.**EAU DE COLOGNE**Farina, J. M.  
Muhlen, F.  
Sainsbury, S.  
Van Oppen & Co.**EMBROCATION**Day & Sons  
Elliman, Sons & Co.  
Harvey & Co.  
Post, A. M., Lim.  
Sanitas Co., Lim.**ESSENCES**Allen & Hanbury, Lim.  
Barnett & Foster  
Bovril, Lim. (Beef)  
Bratby & Hinchliffe, Lim.  
Burgoyne, Burdidge & Co.  
Dush, W. J., & Co.  
Fletcher, Fletcher & Co.  
Goodall, Backhouse & Co.  
May & Baker, Lim.  
Newball & Mason  
Stevenson & Howell  
Woolley, Sons & Co.**ENEMAS**Evans, Sons & Co.  
Lynch & Co., Lim.  
Sanger & Son | Wood, Vincent  
Woolley, J., Sons & Co., Lim.**ESSENTIAL OILS**Allen, S., & Sons  
Barnett & Foster  
Bush, W. J., & Co.  
Essential Oil Importers and Exporters, Lim.  
Evans, Sons & Co.  
Finkler, H., & Co.  
Frankenstein, S. M., & Co.  
Hilbert, Max  
Jackson, J., & Co.  
Jeancaud, Gazan & Doumin  
London Essence Co.  
May & Baker, Lim.  
Orange, Lim.  
Poppelreuter, W.  
Ransom, Wm., & Sons  
Sanitas Co., Lim.  
Socio & Andreoli  
Spurway & Cie.  
Stevenson, H. E., & Co.  
Stevenson & Howell  
Treat, R. C. | Warrick Bros.  
Wilkinson & Simpson, Lim.  
Wright, Layman & Umney**ETHER**Duncan, Flockhart & Co.  
Howards & Sons  
Macfarlan, J. F., & Co.  
May & Baker, Lim.  
Robbins, J., & Co.  
Tyrer, T., & Co.  
White, A., & Sons  
Wright, Layman & Umney**EUCALYPTUS OIL**Sanitas Co., Lim.  
Tasmanian Eucalyptus Oil Co.**EXTRACT MEAT**Armour & Co. | Brand & Co.  
Beaufoy & Co.  
Liebig Co.  
North Queensland Meat Export Co., Lim.**EXTRACTS, FLUID**Allen & Hanbury  
Allen, G., & Co.  
Bleasdale & Co., Lim.  
Burgoyne, Burdidge & Co.  
Evans, Sons & Co.  
Fletcher, Fletcher & Co.  
Heaton, Squire & Francis  
Lloyd, T. Howard, & Co.  
Parke, Davis & Co.  
Potter & Clarke  
Ransom, W., & Son  
Wilkinson & Simpson, Lim.  
Wright, Layman & Umney**EXTRACTS, SOLID**Allen, G., & Co.  
Ransom, W., & Son**EXTRACTS, VEGTABLE**

Fromme Extract Co.

**FEEDING BOTTLES**Evans, Sons & Co.  
Gilbertson, H., & Sons  
Hovenden & Sons  
Kilmer Bros.  
Lynch & Co., Lim.  
Marriott, E., & Co.  
May, S., Son & Thompson  
May, Roberts & Co.  
Youldon, E.**FILTERS**Berkfeld Filter Co., Lim.  
Mawson Filter Co.**FLY CATCHERS**Alabastine Co. (British), Lim.  
Ford, Shapland & Co.  
Marshall, Lim.  
Mather, W., Lim.  
Newbery, F., & Sons  
Smith, J. H., & Co.  
Strong, Christy  
Tunbridge & Wright  
Food (Infants & Invalids)  
Allen & Hanbury  
Beanes, E., & Co.  
Benger's Food  
Bleasdale & Co., Lim.  
Bovril, Lim. | Brand & Co.  
Burgoyne, Burdidge & Co.  
Frame Food Co.  
Fromme Extract Co.  
Goodall, Backhouse & Co.  
Heaton, Squire & Francis  
Liebig Co.  
Mellin's Food  
Milk Wine Co., Lim.  
Nestlé, H.  
Savory & Moore  
Vi-Cocca (Dr. Tibbles')**FOOD (for Plants)**

Sharon Chemical Co., Lim.

**GELATINES**Frankenstein, S. M., & Co.  
Mogget, S., & Sons, Lim.**GLUE**Brauer, A.  
Frankenstein, S. M., & Co.**GLYCERINE**Blackwell & Co.  
Fink & Co.  
Haller, G., & Co.  
Price's Candle Co., Lim.**GRANULAR PREP.**Bishop, A., & Sons  
Evans, Gadd & Co.  
Evans, Sons & Co.  
Heaton, Squire & Francis  
Lloyd, T. Howard & Co.  
Lothouse & Saltmer  
Tyrer, T., & Co., Lim.  
Wright, Layman & Umney**HERB BEER EXTS.**Newball & Mason  
Potter & Clarke  
Thwaites, G.**HAIR PREP.**Alexandre (Shadeline)  
Brooks, Tom  
Chesbrough Co.  
Edwards & Co.  
Sim's, G. R., Hair Restorer  
Co., Lim.  
Thiellay, E. H.**HOMOEOPATHIC**Epps, J., & Co.  
Leath & Ross  
Munyon's Remedies  
Watson & Wates**HYPOPHOSPHITES**Duncan, Flockhart & Co.  
Fellows  
Fletcher, Fletcher & Co.  
Tyrer, T., & Co., Lim.**INHALERS**Cooper & Co.  
Krone & Seesemann  
Lynch & Co., Lim.  
Sanitas Co., Lim.**INSECTICIDES**Bleasdale, Lim.  
Fleming's Oil & Chemical Co., Lim.  
Jackson, T.  
Sanitas Co., Lim.  
Tunbridge & Wright**JELLOIDS**

Warrick Bros.

**LAMPS**

Bruce, F. &amp; J.

**LAVENDER WATER**Jackson, J., & Co.  
Sainsbury, S.**LIME JUICE**

Evans, Sons &amp; Co.

**LINT**Burgoyne, Burdidge & Co.  
Christy, T., & Co.  
Liverpool Lint Co.  
Maw, S., Son & Thompson  
Newsome, C.  
Robinson & Sons**LIQUORICE**Evans, Gray & Hood ("Solazz")  
Evans, Sons & Co. (Savarin)  
Frankenstein, S. M., & Co.  
Hillaby, J.  
Jeancaud, Gazan & Doumin**LIQUORS**Fletcher, Fletcher & Co.  
Lloyd, T. Howard, & Co.  
Oppenheimer, Son & Co., Lim.  
Stevenson, H. E., & Co.**LOZENGES**Allen & Hanbury  
Denoual, J.  
Gibson, R., & Sons (Manfra.)  
Guest, T., & Co., Lim.  
Jackson, T.  
Raines & Co.  
Warrick Bros.**LUNG PRESERVERS**

Zimmer &amp; Co.

**MACHINERY**Barnett, Sons & Shears, Lim.  
Bera, G.  
Fox, Fultz & Co.  
Gardner, W., & Sons  
Hatrick, J. L., & Co., Lim.  
Hilbert, Max  
Mellin, C.  
Newman, W. | Pindar, J. W.  
Werner, Pfeiderer & Perkins, Lim.**MAGNESIA**Bishop, A., & Sons, Lim.  
Bleasdale, W., & Co.  
Henry, T. W. (Calcined)  
Lloyd, T. Howard, & Co.  
Washington Chemical Co.**MALT EXTRACT, &c.**Allen & Hanbury  
Bechme & Co., Lim.  
Burroughs, Wellcome & Co. (Kepler's)  
Distilleries Co., Lim.  
English Diastatic Malt Extract Co., Lim.  
Heaton, Squire & Francis  
Parke, Davis & Co.  
Price's Patent Candle Co., Ltd.  
Raines & Co.  
Raines, Clark & Co.  
Robinson & Co.**MARKING INKS**John Bond's Crystal Palace  
Richford, E. M.**MEDICINE CHESTS**Burroughs, Wellcome & Co.  
Day, Son & Hewitt (Veterinary)  
Day & Sons (Veterinary)**MERCURIALS**Howards & Sons  
May & Baker, Lim.  
Tyrer, T., & Co., Lim.**METH. SPIRIT, &c.**Boord & Son | Burroughs, J.  
Jones & Co. | Phillips, G., & Co.**MICROSCOPES**Darton, F., & Co.  
Leitz, E.  
Ross, Lim.**MILK**Anglo-Swiss Condensed Milk Co.  
Hawkesley, T. (Sterilizer)  
Nestlé, H. (Condensed)  
Lumley, L., & Co. (Sterilised)**MORPHIA**Macfarlan, J. F., & Co.  
Smith, T. H., & Co.  
OILS, VARNISHES  
Calvert Bros. & Co.  
Cooper & Co.  
Frankenstein, S. M., & Co. (Olive, Nut, & Cottonseed)  
Reade Bros. & Co.  
Stern Bros. (White.)**OINTMENT BASES, &c.**Burroughs, Wellcome & Co. (Lanoline)  
Chesbrough Co. (Vaseline)  
Cooper & Co.  
Lloyd, T. Howard, & Co.  
Stevenson, H. E., & Co.  
Thierry, A.**OXIDE OF ZINC**Hubbuck, T., & Son, Lim.  
Stevenson, H. E., & Co.**PALATINOIDS**

Oppenheimer, Son &amp; Co., Lim.

**PATENT AGENTS**

Barker, Reginald W.

**PATENT MEDCNS, &c.**Anglo-American Drug Co., Ltd.  
Beecham, T. (Pills)  
Benedictine Salve  
Clarke's Blood Mixture  
Congreve, J. T.  
Curie, C. The  
"Daisy" Headache Powders  
Edwards & Son  
Evans, Lescher & Webb  
Evans, Sons & Co.  
Fenning (Powders)  
Goodall, Backhouse & Co.  
Guy's Tonic  
Holloway (Pills and Oint.)  
Hovenden & Sons  
Kirk's Phospho-Lactine, Ltd.  
Lageman, C.  
Lalor (Phosphodyne, &c.)  
May, Roberts & Co.  
Nicolay & Co.  
Post, A. M., Lim.  
Pyecroft, Sons, Lim.  
Richards, J. M.  
Thierry, A. (Balsam and Ointment)**PENS**

Jewel Pen Co.

**PEPPERMINT OILS**Bush, W. J., & Co.  
Jackson, J., & Co.  
Ransom, W., & Son  
Stevenson & Howell**PEPSIN, &c.**Armour & Co.  
Burroughs, Wellcome & Co.  
Cerebros Limited (Pepsalla)  
Fairclough, Sons & Foster  
Newbery, F., & Sons (Ingluvin)  
Parke, Davis & Co.  
Stevenson, H. E., & Co.**PERFUMERY****FANCY SOAPS**Allen & Hanbury, Lim.  
Atkinson, J. & E., Lim.  
Ayton & Saunders  
Bleasdale, Lim.  
Blondeau & Cie. | Boehm, F.  
Brooks, Tom  
Burgoyne, Burdidge & Co.  
Burroughs, Wellcome & Co.  
Bush, W. J., & Co.  
Carmichael, M. W.  
Chesbrough Co.  
Cook, E., & Co.  
Corbyn, Stacey & Co.  
Evans, Sons & Co.  
Farina, J. M.  
Frankenstein, S. M., & Co.  
Gosnell, J., & Co., Lim.  
Hilbert, Max  
Hovenden & Sons  
Jackson, J., & Co. | Lanoline  
London Essence Co.  
Lynch & Co., Lim.  
Mason, C. E., & Co.  
Muhlen, F.  
Newbery, F., & Sons (Bardoes)  
Pears, & F. F., Lim.  
Potter & Clarke (Sachets)  
Roberts & Sheppey Injunction  
Sainsbury, S.  
Sanger, J., & Sons  
Schutze, F., & Co. [Co., Lim.  
Sharp Bros. Soap & Perfumery  
Sinclair, Jas., & Son  
Tidman & Son | Treat, R. C.  
Van Oppen & Co.  
Vigo, Jules, & Co., Lim.  
West, T. (Obell's Mona)  
Wilkinson & Co.  
Wright, Layman & Umney**PEROX. OF HYDR.**May & Baker, Lim.  
Robbins & Co.  
Sanitas Co., Lim.**PRESSURES**

Tyrer, T., &amp; Co., Lim.

**RENDILL, W. J.****PHOTOGRAPHIC****X RAY, &c.**Barclay & Sons, Lim.  
Boehm, Fredk.  
Burroughs, Wellcome & Co.  
Butcher, W., & Son  
Cadett & Neall, Lim.  
Cox, H. W., Lim.  
Darton, F., & Co.  
Higgins, C. M., & Co.  
Houghton, S., & Sons  
Isenthal, Potzler & Co.  
Johnson & Sons  
Lockyer, J. E.  
Lowe, D., & Co.  
Mackey, Mackey & Co.  
Raphael, J., & Co. Ross, Lim.  
Thornton-Pickard Co., Lim.  
Tyrer, T., & Co.  
Voigtlander & Sohn (Lenses)  
White, Alfred, & Co.  
Woolley, J. Sons & Co.**PTRLEUM JELLY, &c.**Allen & Hanbury  
Christy, T., & Co.  
Dee Oil Co., Lim.  
Haller, G., & Co.  
Snowdon, Sons & Co., Ltd. (Jell.)  
Stern Bros.**PHARM. PREPS.**Allen & Hanbury  
Armour & Co., | Balas Bros.  
Baron, Harvey & Co.  
Bayard, Sons & Bayard  
Boehm, Fredk.  
Boehringer, C. F., & Sohne  
Burgoyne, Burdidge & Co.  
Burroughs, Wellcome & Co.  
Busse, G. T.  
Davies, Gibbins & Co.  
Duncan, Flockhart & Co.  
Evans, Gadd & Co.  
Evans, Lescher & Webb  
Evans, Sons & Co.  
Fairchild Bros. & Foster  
Ferri & Co.  
Fletcher, Fletcher & Co.  
Heaton, Squire & Francis  
Hewlett & Son  
Hoffmann, La Roche & Co.  
Howards & Sons  
Lageman, C.  
Lothouse & Saltmer  
Macfarlan, J. F., & Co.  
Mackey, Mackey & Co.  
Martindale, W.  
May & Baker, Lim.  
Oppenheimer, Son & Co.  
Parke, Davis & Co.  
Potter & Clarke  
Smith, T. H., & Co.  
Smith, W. E., & Co.  
Squire & Sons  
Stern Bros.  
Stevenson, H. E., & Co.  
Tyrer, T., & Co.  
"Vasogen"  
White, Alfred, & Sons  
Wilkinson & Simpson, Lim.  
Willows, Francis, Butler  
Wyecroft Thompson  
Woolley, Sons & Co.  
Wyley, Lim.**PILL MACHINES**Bennett, Sons & Shears  
Death & Harris  
Pindar, J. W.**PILLS, Coated, &c.**Allen & Hanbury, Lim.  
Beecham, Thomas  
Bleasdale & Co., Lim.  
Comar, F., & Son  
Fox, Art, & Co.  
Doxley, Gibbins & Co.  
Davy, Hill & Son, Yates & Hicks  
Duncan, Flockhart & Co.  
Evans, Gadd & Co.  
Heaton, Squire & Francis  
Holloway, Professor  
Kearsley, C. & G.  
Lloyd, T. Howard, & Co.  
McKesson & Robbins  
Parke, Davis & Co.  
Powell, Thomas, Lim.  
Scottish Sugar-coated Pill Co.  
Scott's, Dr.  
Wand, S. (Pearl Coated)  
Warner, W. R., & Co. (Coated)  
Wyley, Lim.**PLASTERS**Chesbrough M't'g. Co.  
De St. Dalmas, A.  
Evans, Sons & Co.  
Seabury & Johnson  
Solport Bros. (Court)**POLISHING**Bradley & Bourdas (Albatrum)  
Fordham, W. B., & Sons, Lim.  
Oakley, J., & Sons, Lim.  
Raines & Co. (Stockton)**PRINTING**Blake & Mackenzie  
Bowers Bros.  
Cresson, E. (Glass)  
Ford, Shapland & Co.  
Harrison & Walde  
Silverlock, H.  
Thomas & Co.  
Townsend, J.**QUININE**Boehringer, C. F., & Sohne  
Howards & Sons  
Imported Quinine Co.  
Smith, S., & Co. (Wine)  
Zimmer & Co.**RENNET**Duncan, Flockhart & Co.  
Tomlinson & Hayward**RUBBER STAMPS**Bond, J. (Crystal Palace)  
Richford, E. M.**SACCHARIN**Anglo-Continental Chemical Works, Lim.  
Saccharin Corporation, Lim.**SALICIN**Macfarlan & Co.  
Smith, T. H., & Co.**SARSAPARILLA**

Hood, C. L., &amp; Co., Lim.

**SAUCES, PICKLES**

Goodall, Backhouse &amp; Co.

**SEA SALT**

Tidman &amp; Son, Lim.

**SEEDS**Macqueen, J.  
Potter & Clarke**SEIDLITZ POWDERS**

Hara &amp; Co. | May, Roberts &amp; Co.



**SCHOOLS. &c.**

Central (Edinbrgh)  
City and Guilds of London  
Institute  
City of London College  
City School (Skerry's)  
Davis, F.  
Glasgow and West of Scotland  
School (T. S. Barrie)  
Goldsmiths' Institute  
Gordon's (Robt.) School  
Laurence, L. (Optical)  
Leeds College of Pharmacy  
Liverpool School  
Manchester Col. of Pharmacy  
Metropolitan Col. of Pharmacy  
North of England School  
Northern College of Pharmacy  
Royal Dispensary (Edinburgh)  
South London School of  
Pharmacy, Lim.  
South-Western Polytechnic  
Westminster College

**BELTZOGENES**

Bratby & Hinchliffe, Lim.  
May, Roberts & Co.

**SERUM**

Greiff, R. W., & Co.

**SHAVING**

Hovenden & Sons (Exnests)  
Lloyd, A., & Co. (A. S. Lloyd's  
Exnests)

**SHEEP DIP**

Fletcher Bros. & Co.  
Joyes Sanitary Compounds Co.  
Sanitas Co., Lim.

**SHOP FITTERS**

Ayrton & Saunders  
Bygrave, J. & W.  
Ellison, F. E., & Co.  
Evans, Sons & Co.  
Josephs, Philip  
Mills, H.  
Mitchell, A.  
Treble, G., & Son  
Yates, W. S.

**SIZE**

Meggett, S., & Sons Lim.

**SPECTACLES. &c.**

Botwright & Grey  
Darton, F., & Co.  
Laurance, L.  
Worshipful Company of Spec-  
tacle Makers

**SPONGES**

Cohen, I. & M.  
Cresswell Bros. & Schmits  
Peterson, M., & Co.

**SOAP**

Allen & Hanburys, Lim.  
Ayrton & Saunders  
Beetham, T., & Son  
Bronnley, H., & Co.  
Calvert, F. C., & Co.  
Cook, E., & Co.  
Cooper & Co.  
Crosfield, J., & Sons, Lim.  
Finkler, H.  
Frankenstein, S. M., & Co.  
Gibbs, D. & W. (Medicated)  
Hilbert, Max (Materials)  
Ivory Soap Co.  
Joyes Sanitary Compounds Co.  
Mackenzie's, Dr. (Arsenical)  
Maypole Soap Co., Lim.  
Muhlen, F.  
Peacock's Ovaline Soap Co.,  
Lim.  
Pearse, A. & F., Lim.  
Sharon Chemical Co., Lim.  
Sharp Bros. Soap, &c., Co., Ltd.  
Sinclair, J., & Son  
Tidman & Son  
Vinolia Co., Lim.  
Wright, Layman & Umney

**STARCH**

Critchley, T. (Gloss)  
Hebden, W. C. (Gloss)

**STOPPERS**

Anetin & Co. (Sprinklers)  
Barnett & Foster | Mellin, C.  
Patent Stopper, Box, and  
Stamping Co., Lim.  
Stipendium Stopper Co., Lim.

**STOVES**

Clark, S., & Co., Lim.

**SURGICAL**

Bailey, W. H., & Son  
Barclay & Sons, Lim.  
Burgoyne, Burdidges & Co.  
Domen Belts Co.  
Eschmann Bros. & Walsh  
Ferris & Co.  
Galen Manufacturing Co., Lim.  
Herrick, J. J. & Co., Lim.  
Haywood, J. H.  
Krohn & Sesemann  
Lee Ellwood, J., & Co.  
Liverpool Patent Lint Co.  
Lynch & Co., Lim.  
Macfarlan, J. F., & Co.  
Manson, R.  
Matto, Lim.  
Maw, S., Son & Thompson  
Oppenheimer, Son & Co., Lim.  
Pochet, J., & Co.  
Powell & Barstow  
Quelch, H. C.  
Robinson & Sons  
Schutze, F., & Co.  
Wood, Vincent  
Woodruff, T.

**SUGAR**

Macfie & Sons

**SYPHONS**

Barnett & Foster  
Bratby & Hinchliffe, Lim.  
Chemists Aerated and Mineral  
Waters Association, Lim.  
Gerault, E., & Co.  
Idris & Co., Lim.  
Kiner Bros. | Mellin, C.

**SYRUPS**

Beckett, W., Sons & Co.  
Fletcher, Fletcher & Co.  
(Liquors)  
Stevenson & Howell  
Volcanic Aeration Co.  
Wander, Dr. A.

**TABLETS**

Corsan, J. R. (Advertising)  
Fraser's Tablets, Lim.  
"Orain"  
Roberts & Sheppy

**TEA**

Thomas & Co.  
Tower Tea, Lim.

**TEETHING PADS**

Marriott, E., & Co.

**THERMOMETERS**

Ayrton & Saunders  
Bailey, W. H., & Son  
Darton, F., & Co.  
Denton, S. G.  
Peroni, A.

**TOILET**

Allen & Hanburys, Lim.  
Ayrton & Saunders  
Barker, F., & Son  
Beetham & Son  
Burroughs, Wellcome & Co.  
(Lancoline)  
Crosfield, J., & Sons, Lim.  
Dee Oil Co., Lim.  
Day & Sons  
Langwisch, B.  
Lynch & Co., Lim.  
Major & Co., Lim.  
Maw, S., Son & Thompson  
Peacock's Ovaline Soap Co.,  
Lim.  
Quelch, H. C.  
Sanitas Co., Lim.  
Sharon Chemical Co., Lim.  
Sharp Bros. Soap & Perfumery  
Co., Lim.  
Solport Bros.  
Southall Bros. & Barclay  
Squire & Sons  
Tidman & Son, Lim.  
Townsend, J. (Paper)  
Vinolia Co., Lim.

**TINCTURES**

Evans, Sons & Co.  
Hewlett, C. J., & Son  
Lloyd, T. Howard, & Co.  
Parke, Davis & Co.  
Wyleys, Lim.

**TOBACCO & CIGARS**

Levy & Thomas  
Singleton & Cole, Lim.

**TOOTH PASTE**

Beecham, T.  
Jewebury & Brown  
Maw, S., Son, & Thompson  
Parke, Davis & Co.  
Sutton, O., & Co.  
Woods, M. (Areca)

**TRADE MARK AGENTS**

Barker, Reginald W.

**VACCINATION**

Cowan, W. (Shields)  
Maw, S., Son & Thompson  
Vaccine Association (Lymph)

**VALUERS AND****TRANSFER AGENTS**

Berdoe & Co. | Brett, F. J.  
Ferguson & Osborne  
Judd & Manners  
Orridge & Co.  
Tomlinson, Thos., & Son

**VANILLA**

Pavia, F.

**VARNISHES. &c.**

Brown, W., Sons & Co.  
Reade Bros. & Co.

**VASELINE**

Chesebrough Co.

**VETERINARY**

Bird & Storey  
Chambers, J. F.  
Day & Sons  
Day, Son & Hewitt  
Dobson, G.  
Elliman, Sons & Co.  
Harvey & Co.  
John, A., & Co.  
Long, A., & Co.  
Lloyd, T. Howard, & Co.  
Rackham & Co.  
Rookledge, F. E.  
Sanitas Co., Ltd. | Spratt's (Dogs)  
Walker, Troke & Co.

**VINEGAR**

Grimble & Co.

**VINOLIA Superfatted**

Vinolia Co., Lim.

**WEED KILLER**

Acme Chemical Co., Lim.  
Fletcher Bros. & Co.  
North of Ireland Chemical Co.  
Sanitas Co., Lim.  
Tomlinson & Hayward

**WHOLESALE & EXPT****DRUGGISTS**

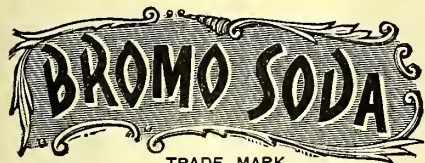
Allen & Hanburys  
Allen, S., & Son | Balis Bros.  
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Burgoyne, Burdidges & Co.  
Bueh, W. J., & Co.  
Corbyn, Stacey & Co.  
Davies, Gibbins & Co.  
Davy, Hill & Son, Yates & Hicks  
Evans, Gadd & Co.  
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Ferris & Co. | Graf, F.  
Goodall, Backhouse & Co.  
Harker, Stag & Morgan  
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Kemp, Wm., & Son  
Lloyd, T. Howard, & Co.  
Lofthouse & Salter  
London Essence Co.  
Macfarlan, J. F., & Co.  
Potter & Clarke  
Raines, Clark & Co.  
Smith, B. A., & Co.  
Stevenson, H. E., & Co.  
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Willows, Francis, Butler  
Ayrecoth Thompson  
Woolley, Jas., Sons & Co.  
Wright, Layman & Umney  
Wyleys, Lim.

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Miller, A., & Co. (Orange)  
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Smith, S., & Co., Lim. (Orange)  
Stevenson, H. E., & Co.  
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**WM. R. WARNER & CO., PHARMACEUTICAL CHEMISTS.**

Sixteen International Prize Medals Awarded.



Bromide of Sodium with Caffeine, in the Granular form. Very carefully and evenly made. Invaluable in Brain Fatigue arising from Overwork, etc. The *Lancet* (August 6, 1887, p. 265) states that "the Sodium compound does, in fact, agree better (than the potassium salt) with some stomachs."

Unequalled in their medicinal properties or in SOLUBILITY. Each pill will produce the effects expected, and an experience of thirty years, coupled with unremitting care and study has enabled the manufacturers to achieve RESULTS OTHERWISE UNATTAINABLE.

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Elegant Counter Vases, of four different patterns and sizes. Prices from 4/10 upwards including 1,000 Pills. See full details in Warner's Price List.

"No. 120" is an "all round" Antibilious or Liver Pill which has found universal favour.

R. Podophyllin, 1/2 gr.; Ext. Colocynth, 1/2 gr.;	Per 1,000	Per Stopped	Per Bottle	
Fv. Soc. Aloes, 1 gr.; Fv. Scammony, 1/2 gr.;	in Plain	Vase, with	(Bulk)	Per 10,000
Fv. Saponis, 1-8 gr.; Ext. Hyoseyami, 1-8 gr.;	Bottle	painted glass	of 5,000	34/2
Gingerine, 1-8 gr. Dose, 2 to 4.	4/-	label, 6/4	17/6	

The essential principle of the gizzard, and bearing the same relation to poultry that pepsin does to the higher animals. Where pepsin refuses to act, and where, in severe cases, it has even been rejected by the stomach, Ingluvine has rapidly effected relief. Per oz. Bottle (stamped), 4/6. Supplied unstamped, and in 4-oz. bottles (also in lentiforms) for Dispensing. [3]



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(Guaranteed prepared from Liebig's Extract of Meat).

*Sample and Prices on application with Trade Card.*

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SOUTH LAMBETH, LONDON, S.W.

Established 1730.

[2]

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# PURE ORANGE WINE

(VINUM AURANTIL, B.P.) prepared in strict accordance with the Formula of the British Pharmacopoeia.



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GALE STREET DISTILLERY  
CHELSEA,  
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WRITE FOR PRICES AND SAMPLES.

Dr. A. B. GRIFFITHS says, "Second to none in the market."—Aug. 24, 1896.

Also S.V.R. & S.V.M.  
At Lowest Prices. [3]



A COMPLETE APPARATUS,  
CAPABLE OF PRODUCING  
OVER

**300 DOZ. BOTTLES**

of Aerated Water per day,  
at a minimum of cost,  
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**£20.**

**SODA-WATER MACHINERY**  
AND ALL APPLIANCES FOR THE TRADE.  
NO DANGER. NO MESS.

Write for  
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For the treatment of CHRONIC GASTRIC CATARRH, HYPERÆMIA of the LIVER, GALLSTONES, CHRONIC CONSTIPATION, DIABETES, RENAL CALCULI, GOUT, and DISEASES of the SPLEEN.



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(POWDER or CRYSTALS).

The Powder has the great advantage in not being affected by change of temperature or exposure to the atmosphere, and therefore in this form is the most reliable.

"SPRUDEL," "MUHLBRUNNEN," OR  
"SCHLOSSBRUNNEN"

(Water) in Cases of 50 bottles.

To avoid imitations, please see that THE WRAPPER round each bottle bears our signature

A Sample of the Salt in Powder Free to Members of the Medical Profession.



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# PHARMACEUTICAL SUGAR.

GUARANTEED PURE CANE GRANULATED SUCROSE, ENTIRELY FREE FROM BLUE.

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"A Pure Granulated Sugar entirely free from colouring matter, specially adapted for making syrups and other preparations."

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DR TIBBLES' F-Cocoa (1898), Ltd.,

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## CONCENTRATED PEPTONISED COCOA AND MILK AND CONCENTRATED PEPTONISED MILK.

These two preparations are made with pure rich PRE-DIGESTED Country Milk, and, by mere dilution with hot water afford a delicious restorative beverage, the assimilation of which requires no digestive effort.

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Tins, 2/6. Half-tins (samples), 1/6. Obtainable Everywhere.

## TEE-TO-TUM TEAS

ARE OF  
EXCEPTIONAL VALUE.

PRICES—

11d., 1/1, 1/4, 1/6, 1/8, 1/10, 2/- per lb.

In 1/2-lb., 1-lb. and 1-lb. Packets, and 5, 7, or 10 lb. Tins.

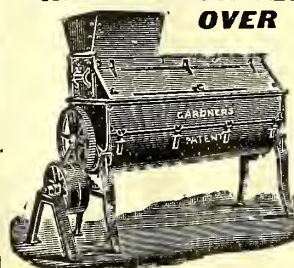
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**OTTO THOMAS, LIMITED,** Proprietors of  
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OVER 1,020 working in  
Almost Every Trade where  
POWDERS are Sifted and  
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FOR HAND OR POWER.

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## YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

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Make a Delicious and Nutritious Jelly. In ½-pint, 1-pint, and quart boxes, 3d., 6d., and 1s. each.

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For prices and terms of above see Monthly Price Current.  
Special net cash prices quoted for wholesale quantities.  
Arrangements made for packing goods with customer's name  
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May be obtained by adding the

## WINE TRADE

AS A BRANCH.

## LICENSE DIFFICULTY OVERCOME.

Write at once for particulars to

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WHO OBTAIN SAME WITHOUT DELAY.

**PORTS,  
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Holloway's Coca Wine,  
"Vinervo."Holloway's Meat and Malt  
Wine, "Vinvires."Holloway's Invalid Port,  
1/6 and 2/9 per bottle.

Less 33½ per cent.

A postcard will fetch our price list and full particulars,  
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61 New Oxford St., &amp; Dyott St., LONDON, W.C.

Our Wines are manufactured under the supervision of  
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## MILK IS DANGEROUS! UNLESS YOU STERILIZE IT

Every Household should Use

## THE "GNOM" PATENT Domestic Sterilizer

The great feature of this patent process of sterilization is that immediately the milk is placed in the bottle the stopper is closed—even during the sterilizing process—and must never be opened until the milk is required for use, thus rendering sterilization practically automatic. This is achieved by the patent stopper, the spring of which rises to release the pressure during sterilization, and automatically closes immediately the pressure is relieved.

SIMPLE, EFFECTIVE, and does not affect the  
GOODNESS or TASTE of the Milk.



Process so simple that anyone can carry it out.  
Of all Chemists Ironmongers, &c.

WHOLESALE ONLY OF  
**L. LUMLEY & CO.,** 1 America Square, LONDON. E.C.



THE MOST ECONOMIC, CONVENIENT, &amp; PORTABLE FORM OF SOUP.

**LAZENBY'S  
SOUP  
SQUARES**

(MULLIGATAWNY, GRAVY, JULIENNE, ETC.)

ONE <b>6</b> SQUARE	WILL MAKE A
	<b>PINT &amp; A HALF</b>
	OF STRONG
	NUTRITIOUS SOUP

*Prepared by E. LAZENBY & SON, LTD 18, Trinity St., LONDON, S.E.*

SOLD BY GROCERS, STORES, ETC.

**PUMILINE.****PRICE LIST.**

1/6 Essence, 1/2 oz. ...	15/- doz.	} less 10 %	1 1/2 Ointment ...	11/- doz.	} less 10 %
2/6 do. ...	24/- "		2/9 Ointment... ..	27/- "	
2 oz. do. ...	3/- each	} net	8 oz. do. ...	5/6 each, less 5 %	} less 10 %
4 oz. do. ...	6/- "		1/6 Soap ...	15/- doz.	
6 oz. do. ...	9/- "		1/- do. ...	9/- "	
1/- Extract ...	9/- doz.	} less 10 %	1/6 Dry Inhalers ...	14/- "	
1/1 Jujubes (Coated) ...	11/6 "		10/6 Steam Inhalers... ..	120/- "	
2/3 do. do. ...	22/- "		2/- Wool Packet ...	18/- "	
1/1 do. (Plain) ...	11/6 "		Wound Pads ...	1/6 "	
2/3 do. do. ...	22/- "		1 1/2 Plasters (in Tins) ...	10/- "	
1/9 Liniment... ..	20/- "		1 1/2 Zalones ...	12/6 "	

"Your 'Pumiline' preparations act like **MAGIC** in cases of Chronic Bronchitis and Laryngeal Catarrh."—Sir MORELL MACKENZIE.

"Stern's Pumiline (Liniment and Extract) **MOST EFFICIENT** in cases of Acute Rheumatism and Sciatica."—Dr. AMBROSE, London.

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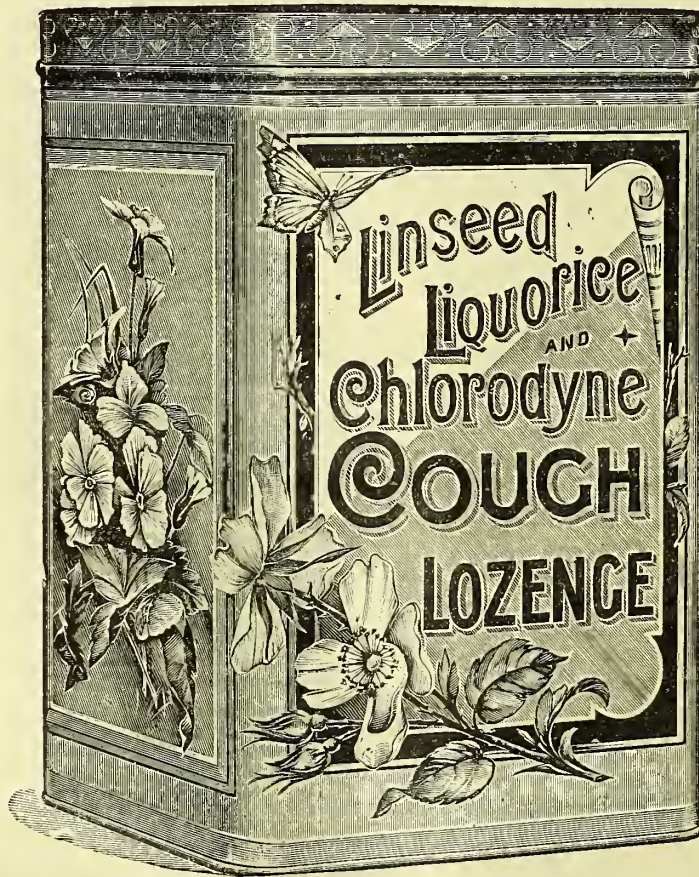
MANCHESTER, AND  
1 GLASSHOUSE YARD, LONDON,

London Telephone—No. 471, Holborn.

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Telegraphic Address—'NOSBIG MANCHESTER.'

Beg respectfully to call the attention of buyers to their new enamelled and beautifully decorated Tins for Linseed, Liquorice, and Chlorodyne Lozenges.



Each Tin holds 7 lbs., and is given with the Lozenges, besides affording security for them keeping in any climate. The Tins provide a handsome Show Case for the Counter, and will, no doubt, lead to an increasing demand. Every Wholesale House in or out of London can supply, or indents may be sent direct to Manchester.

PRICE LIST ON APPLICATION.



# "LAIT Larola"

Reg<sup>d</sup>

A Delightful SKIN TONIC as well as an EMOLLIENT.  
**COOLING and REFRESHING.**

BEST WHOLESALE TERMS direct to the RETAIL TRADE.

BEETHAM'S				RETAIL.	PER DOZ.
				s. d.	s. d.
LAIT LAROLA	...	...	...	6	5 0
" "	...	...	...	1 0	10 0
" "	...	...	...	1 9	18 0
" "	...	...	...	2 6	25 0
" LAROLA TOILET POWDER	...	...	...	1 0	10 0
" "	...	...	...	2 6	25 0
" LAROLA ROSE BLOOM	...	...	...	1 0	10 0
" "	...	...	...	1 6	15 0
" "	...	...	...	2 6	25 0
" LAROLA TOILET SOAP (3 Cakes in Box)	...	...	...	1 6	15 0
" LAROLA DENTIFRICE	...	...	...	1 0	10 0
" "	...	...	...	2 6	25 0

For  
£2 Lots,  
20 per cent.  
discount  
CASH,  
on receipt of  
Invoice.

CARRIAGE NOT  
PAID.

## BEETHAM'S NEW TOILET MILK

IS AN  
IMPROVED PREPARATION  
— of their Celebrated —  
GLYCERINE  
AND  
CUCUMBER.

IT HAS NO EQUAL FOR  
KEEPING

THE SKIN SOFT,  
SMOOTH AND WHITE,  
AT ALL SEASONS, AND  
REMOVES AND PREVENTS ALL  
ROUGHNESS, REDNESS, TAN,  
CHAPS, IRRITATION, ETC.

N.B.—BEETHAM'S GLYCERINE  
and CUCUMBER is still supplied  
as usual.

M. BEETHAM & SONS, Chemists, CHELTENHAM.

## SALVO PETROLIA

A SUPERIOR VASELINE.

May be procured through all Chemists and Druggists, and is  
Manufactured solely by the Proprietors,

THE DEE OIL COMPANY,  
LIMITED  
Works: SALTNEY, CHESTER.

## SALVO PETROLIA

Sanctioned by the Board of Trade Marine Department, and included in  
their instructions issued May, 1894, to superintendents of Mercantile  
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Manufactured in five distinct qualities—WHITE, LEMON, YELLOW, GOLDEN,  
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Packed in tins 1, 2, 4, 5, 7, 10, 14, and 28 lbs., 56 and 112 lb. Drums, and  
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## OLEUM DEELINÆ

(REGISTERED).

GENERALLY ADOPTED BY THE MEDICAL PROFESSION FOR

Ophthalmia, Scurvy, Ringworm, Eczema,  
and all Skin Diseases.

Packed in Cases—One dozen 1s. Bottles; One dozen 2s. Bottles. Pint  
Bottles 4s. 6d. each for Hospitals and Dispensing Chemists. Testimonials  
may be had upon application.

## "OLLAPEARL,"

THE DENTIFRICE OF THE AGE.

ABSOLUTELY NOVEL AND INGENIOUS.

Perfumed and Carbolic, 6d. and 1s. BONUS WITH  
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## OKELL'S ORIGINAL MONA BOUQUET

(First introduced by the late JOSEPH OKELL).

Registered Trade Mark, "DOUGLAS PIER."

The most popular and best-selling perfume in the market.  
Retail Prices, 1/-, 1/9, 3/6, 6/-, 7/6, 10/6 per Bottle.

ALSO 3d. SAMPLE BOTTLES.

Shippers and Wholesale Buyers supplied on the best terms by  
THOMAS WEST, 1185 & 1187 CHESTER ROAD, MANCHESTER,  
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*Extra Cream. Milled. Superfatted.*

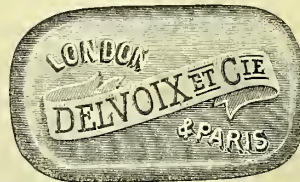
Only 19/- gross,  
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6d. Tablet  
on the market.



Delightfully  
Perfumed, and  
Beautifully  
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Almond Cream  
Borax and Honey  
Buttermilk (Tablets)  
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Carbolic Acid  
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Cold Cream  
Curd  
Elder Flower  
English Honey  
Fullers' Earth  
Glycerine and Almond  
Glycerine & Cucumber  
Heliotrope



## VARIETIES.

Honeysuckle  
Lavender  
Marshmallow  
Oatmeal  
Oatmeal and Glycerine  
Pumice Stone  
Otto of Rose  
Red and White Rose  
(Balls)  
Red and White Rose  
(Tablets)  
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Rose Cream  
Sulphur Cream  
Violet de Parme  
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19/- gross, in handsomely labelled 1 doz. Boxes for the Counter.

*One Gross sent Carriage Paid to any Railway Station or Port in the United Kingdom.*

We are so absolutely certain of the saleability of these Soaps that we are perfectly willing to send an assorted gross on approval for seven days, and pay the back carriage if returned. We cannot say or do more than this.

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LYMAN, SONS & CO., TORONTO.  
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Wholesale and Export Druggists, Analytical Chemists.

MANUFACTURERS OF ALL PHARMACEUTICAL PREPARATIONS.

Offices: 22 GREAT ST. HELENS, E.C. Laboratories and Drug Warehouses: 300 HIGH HOLBORN, 61 and 62 EAGLE STREET, and 7 and 8 FISHER STREET, LONDON, W.C.

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Are specially manufactured by C., S. & Co., Ltd., by the most recent and approved process from the finest raw products imported direct from the South of France, and are superior for richness and delicacy of odour to any yet introduced into this country.



In Bulk or in highly Attractive Cases.

Also in Special Quarter-pound Bottles, containing five fluid ounces of TRIPLE EXTRACTS, and labelled with Fancy Coloured French-style label, and sealed with Gold Monogram.

### POT POURRI.

Fancy Gold Caskets, in Fancy Leatherette Cases, filled with Pot Pourri. Good selling line.

### GRECIAN BOUQUET.

This favourite and lasting Perfume is especially recommended as commanding a ready sale.

EAU DE COLOGNE, LAVENDER WATER, TOILET WATERS, SPRAYS, ETC.

## GEO. HALLER & CO., SUSSEX HOUSE, 52 LEADENHALL ST.

### SPECIALITIES:

**GLYCERINE**, all qualities, chemically pure, B.P. 1898, Ph. Jap. II., P.G. III., commercial white and half-white, crude, brown, &c.

**MINERAL OILS**, importers of white, half-white, and yellow, bloomless, &c.; all qualities for Technical, Cosmetical, and Pharmaceutical purposes.

**PARAFFINUM LIQUIDUM**, B.P. 1898.

**SLAB OIL.**

**PETROLEUM JELLY** of all grades—white, half-white and yellow.

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**CERESINE, GELATINE, CAMEL** (Burnt - sugar Colouring).

**CONCENTRATED SPIRIT VINEGAR.**

**PRECIPITATED CHALK. SOLIDIFIED OILS.**

A 50% Line to Chemists and Grocers.

THE NEW SHAMPOO.

"GOLDEN AMBERLAVE."

4/-, 8/-, 12/-, and 20/- per doz.

AN IMPROVED FLUID SOAP

(As supplied to H.R.H. the Prince of Wales, T.R.H. the Prince and Princess Charles of Denmark).

MOST PURE. MOST AGREEABLE. MOST CLEANSING.

Messrs. McKESSON & ROBBINS, Fulton Street, New York; any Wholesale House in London; or [1]

CARMICHAEL, 158 NEW BOND STREET.

## BRECKNELL'S PRIZE MEDAL.

Recommended by Eminent Medical Men. **SKIN** Unscented, yet Sweet as a Rose.

Although low in price, it ranks with high-class soaps, and is altogether the best extant for producing a Clear and Healthy Skin.

**SOAP.**

The longer it is kept the more it improves and increases in value LIBERAL TERMS TO THE TRADE.

**BRECKNELL TURNER & SONS, LIMITED.**

To Her Majesty, &c., &c., 31 HAYMARKET, LONDON: ESTABLISHED 1862.



# A NEW COVERED POT

NEAT, CLEAN, ECONOMICAL.

For Dispensing, Vaseline, Pomades, Toilet Preparations, &c.

## SPECIAL FEATURES :

Body made of Fine Earthenware. Cap of Celluloid with White Metal lining, fitting closely to the jar.

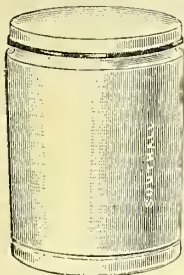
Less expensive than the old Covered Jar. Loss from breakage of lids impossible.

Can be had either with White or Imitation Tortoiseshell Caps.

PRICES ...  $\frac{1}{3}$  ...  $\frac{1}{5}$  ...  $\frac{1\frac{1}{2}}{7}$  ...  $\frac{2}{19}$  ...  $\frac{3}{23}$  ...  $\frac{4}{28}$  ounce, dozen.

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**MAKERS OF MEDICATED LOZENGES AND JUJUBES.**

B.P., T.H. Ph., and General Proprietary Lozenges. Decorated Tin Cartons of 2 and 4 lbs. Linseed, Licorice and Chlorodyne—a Speciality. Finest Gum Jujubes and Pastilles—Glycerine and Black Currant, &c. Granular and all Effervescing Preparations. Boiled Sugars, Floral Tablets.

**SEND FOR LIST, SAMPLES, AND COMPARE.**

TELEPHONE 235. TELEGRAMS "GUESTO."

# THE WANT OF THE DAY!

**NO MORE SOFT LINEN WHEN STARCHED.**

Used in the Royal Laundries.

Should be used in Every House.

The Greatest Boon ever offered to the Laundress for imparting an IVORY-FINISH to Starched Linen, Laces, &c. It does not stick to spider-web-like materials.



Registered No. 40876.

Once Tried, Always Wanted.

Makes Old Linen Like New.

From the Chief Laundress to H.R.H. the Prince of Wales:—West Newton, near Lyna, Norfolk, Aug. 23, 1879. SIR,—Having tried your "STARCH GLOSS," I certainly think it a great improvement—far superior to any I have tried. Yours truly, E. ELDER.

To Mr. CRITCHLEY.

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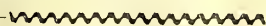
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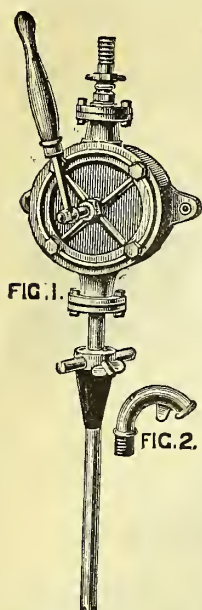


FIG. 1.

FIG. 2.

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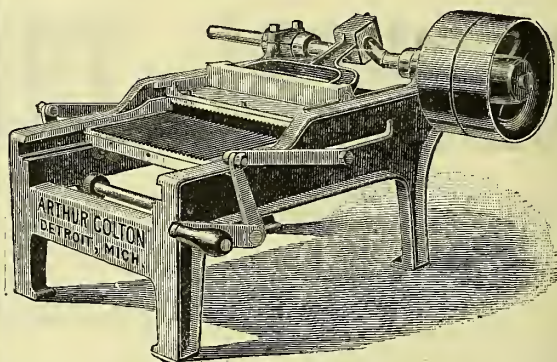
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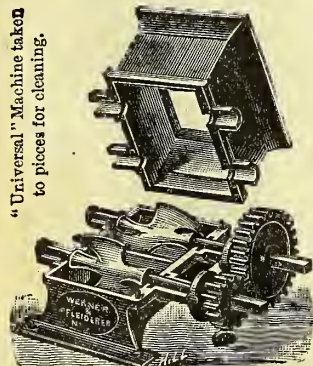


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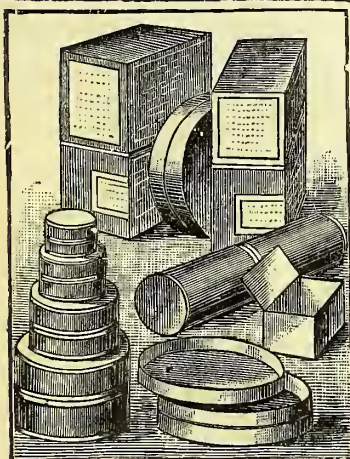
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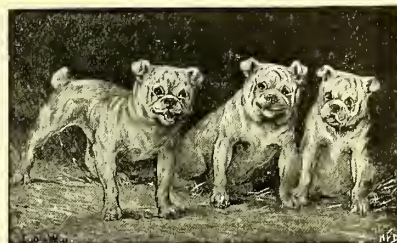


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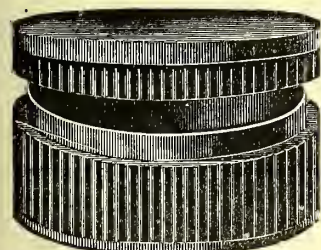
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1. Because they are prepared from materials of the highest quality only.
2. Because they are made according to the B.P. or other Standard Authorities, and therefore all the combinations are well tried and of recognised value.
3. Because they are taken pleasantly—being tasteless—and readily, being ovoid in form.
4. Because they are not subjected at any stage of preparation to the injurious action of heat.
5. Because the coating of *pure transparent gelatine* preserves the contents from oxidation.
6. Because they are always soluble, and the contents soft and quickly disintegrated.

## LIST OF PRINCIPAL CAPSULED PILLS.

Aloes, all the B.P. combinations..... 5 gr.  
Aloes, Dilute (Dr. Hall Dinner Pill)..... 4 gr.  
Aloes Barb.  
Saponis Pulv.  
Pulv. Ext. Glycyrrh.  
Theriac, ãã..... 1 gr.  
Aloes and Nux Vomica—  
Aloes Soc. .... 1½ gr.  
Ext. Nucis Vom..... ½ gr.  
Aloin ..... 1, 2, 3, 1 gr.  
Aloin, various combinations.  
Anti-Dyspepsia (Fothergill)—  
Strychnina ..... ½ gr.  
Pulv. Piper Nig. .... 1½ gr.  
Pulv. Ipecac..... 2-3 gr.  
Ext. Gent..... 1 gr.  
Arsenious Acid..... 1-20, 1-50 gr.  
Asafœtida, U.S. and B.P..... 5 gr.  
Atropine ..... 1-100, 1-300 gr.  
Blue Pill, B.P. .... 1, 2, 3, 5 gr.  
Blue Pill, with Colocynth and Hyoscyam... 5 gr.  
Calomel Sulphide ..... 1-10, 1-4, 1-2, 1 gr.  
Calomel, Colocyn., and Hyosc..... 5 gr.  
Calomel Co., B.P. .... 5 gr.  
Camphor and Hyoscyam..... 2 gr.  
Camphoræ  
Ext. Hyoscy., ãã ..... 1 gr.  
Cannabis Indica ..... 1-4, 1-2 gr.  
Cascara Sagrada..... 3 gr.  
Cathartic Comp., U.S.P.  
Ext. Jalap ..... 1 gr.  
Ext. Coloc. Co. .... 1-15 gr.  
Hyd. Subchlor. .... 1 gr.  
Gambog. .... 1-4 gr.  
N.B.—The ready solubility of the "McK. & R." Pills is readily proved by taking a dose of these.  
Colocynth Comp., B.P..... 4, 5 gr.  
Colocynth, other combinations.  
Copaiba Compound—  
Cubebæ Pulv. .... 2 gr.  
Ferri Sulph. Exsic..... 1-2 gr.  
Mass. Copaib. .... 1 gr.  
Tereb. Venet..... 1-12 gr.  
Corrosive Sublimate..... 1-30, 1-20, 1-10 gr.

Ocroton Oil..... 1-2 gr.  
Diuretic—  
Ext. Buchu, Potass. Nitrat..... 1 gr.  
Scilla Pulv. .... 1-2 gr.  
Emmenagogue—  
Ferr. Sulph. Exsic. .... 1-12 gr.  
Thus, American ..... 1-12 gr.  
Aloes Socot. .... 1-2 gr.  
Ergotin ..... 3 gr.  
N.B.—Each Pill = 30 gr. ergot or 30 ms. fl. extract. This form is more reliable and uniform in effect and more agreeable than the liquid preparations.  
Ergonin ..... 2, 3 gr.  
Iodoform and Iodoform with Iron..... 1 gr.  
Ipecac. .... 1-4, 5 gr.  
Ipecac. Co. .... 5 gr.  
Ipecac. and Squill, B.P. .... 5 gr.  
Iron Pill, B.P. Add. .... 3, 5 gr.  
Iron Arseniate ..... 1-8 gr.  
Iron reduced by Hydrogen (Quevenne)... 1, 4 gr.  
Iron and Quinine Citrate..... 2 gr.  
Laxative, Vegetable—  
Res. Podoph. .... 1-4 gr.  
Ext. Hyoscy. .... 1 gr.  
Ext. Tarax. ãã..... 1-4 gr.  
Ext. Coloc. Co. .... 1 gr.  
Jalapæ ..... 1-2 gr.  
Res. Leptand. ãã..... 1-2 gr.  
Ol. Menth. Pip. .... 1-16 gr.  
Mercury, Biniodide ..... 1-20, 1-16, 1-8, 1-4 gr.  
Mercury, Proto-iodide.... 1-20, 1-16, 1-8, 1-4 gr.  
N.B.—Made from the absolutely pure *yellow* impalpable powder, free from mercury and from biniodide.  
So-called "green" proto-iodide contains uncombined mercury.  
Mercury with Chalk ..... 1 gr.  
Morphine Muriate ..... 1-8, 1-4 gr.  
Nitro-Glycerine ..... 1-200, 1-100, 1-50 gr.  
Opium ..... 1 gr.  
Opium and Camphor..... 1 gr.  
Opil Pulv. .... 1 gr.  
Camphoræ ..... 2 gr.  
Pepsin, Pure ..... 1 gr.  
Phosphorus ..... 1-100, 1-50, 1-30 gr.

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Phosphorus and Iron—  
Phosphor. Pur. .... 1-50 gr.  
Ferr. Redact. .... 2 gr.  
Phosphorus, Iron, and Quinine—  
Phosphor. Pur. .... 1-100 gr.  
Ferri Carb. .... 1 gr.  
Quinine Sulph. .... 1 gr.  
Phosphorus and Nux Vomica—  
Phosphor. Pur. .... 1-50 gr.  
Ext. Nucis Vom..... 1-4 gr.  
Phosphorus and Quinine—  
Phosphor. Pur. .... 1-50 gr.  
Quinine Sulph. .... 1 gr.  
Phosphorus and Valerianate of Zinc—  
Phosphor. Pur. .... 1-50 gr.  
Zinci Valer. .... 1 gr.  
Piorotoxin ..... 1-80 gr.  
Podophyllin ..... 1-3, 1-4, 1-2 gr.  
Quinine, Bisulphate .... 1-4, 1-2, 1, 2, 3, 4, 5 gr.  
Quinine, Sulphate .... 1-4, 1-2, 1, 2, 3, 4, 5 gr.  
Quinine Co. (Anti-Malarial).  
Largely prescribed in America with excellent results.  
Rhubarb Comp., B.P. .... 5 gr.  
Rhubarb with Blue Pill ..... 5 gr.  
Salicylic Acid ..... 2, 5 gr.  
Soap Comp., B.P. .... 5 gr.  
Squill Comp., B.P. .... 5 gr.  
Strophanthus ..... 1-20, 1-4 gr.  
Strychnine ..... 1-50 gr.  
Tonic Laxative (Fothergill)—  
Quinine Sulph. .... 2-3 gr.  
Strychn. .... 1-30 gr.  
Ferri Redact.  
Ext. Bellad. ãã ..... 1-4 gr.  
Valerianates, Iron, Quinine, and Zinc.  
Warburg's Tincture and the same without Aloes.  
Each Pill = 1 fl. dr. of the Tincture.  
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Zinc Valerianate ..... 1 gr.

Special Combinations of 3,000 or more Pills made and Capsuled to order for Hospitals, &c., at Special Quotations.

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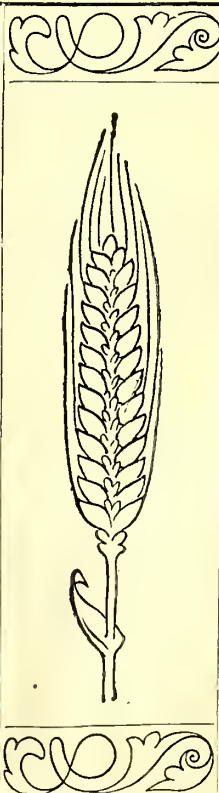
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Pharmaceutical Society of South Australia.  
Pharmaceutical Society of Tasmania.  
Pharmaceutical Society of Western Australia.

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### OUR WINTER ISSUE.

WE cannot accept advertisements for insertion in our issue of next week after Tuesday, January 24. The number being larger than usual, we are compelled to go to press with it a day earlier in the week. It will be

#### A Very Good Number for Advertising In,

as it will go to no fewer than twelve thousand of the best buyers of all kinds of chemicals, pharmaceuticals, and druggists' goods in all parts of the world, especially in the British Empire. We strongly urge upon business houses the necessity of not missing this splendid opportunity of

#### Extending and Fostering Business.

Orders for space and copy for advertisements should be sent to the Publisher, 42 Cannon Street, London, E.C., by an early post.

#### Small Advertisements for the Supplement

will be received up to Thursday as usual, but it will facilitate our arrangements if we receive these early in the week.

### Summary.

WE discuss various methods of storing poisons (p. 96).

PITKEATHLY WATER is causing litigation in Scotland (p. 81).

IMPURE PHENAZONE is reported on by Mr. A. J. Dey (p. 91).

THE "INVENTED-WORDS" COMPETITION is summed up on p. 97, and prizes are awarded.

DISPENSING-PROBLEMS of exceptional interest are dealt with by Edinburgh assistants on p. 90.

GINSENG-ROOT is either American or Asian. Mr. T. H. Wardleworth tells the difference in a note on p. 89.

MITCHAM objects to its lavender breezes being tainted with H<sub>2</sub>S, and there is a case in court about it (p. 99).

FREIGHTS to British colonies are pressing hard upon export druggists. The need for united action is urged on p. 96.

PARTICULARS of the borax conversion, whereby the vendors are said to have made half a million, are given on p. 110.

THE ARTIFICIAL-MUSK case decision has been reserved. Dr. Passmore and Mr. Gordon Salaman gave evidence for the defence (p. 98).

ROYAL BAKING-POWDER is in court again. The American company move to prevent an English firm from using the description (p. 99).

HENBANE were the subject of some remarks by Mr. Gilderdale at Newcastle. He spoke of the relative merits of the annual and biennial (p. 89).

MENTHOL is interesting buyers and sellers of it just now on account of probable insufficient supplies from Japan. The situation is reviewed on p. 95.

THE CHEMISTS' BALL came off on Wednesday evening, 250 being present. Another chemists' ball with 200 dancers was held at Plymouth (p. 104).

THE depositions of the doctor and his dispenser at the inquest at Stockport last week concerning a fatal dispensing error are given in full (p. 81).

MR. GLYN-JONES writes to the Privy Council on the dispensing in surgeries, basing his arguments on the recent fatal accident at Heaton Norris (p. 107).

THE NAMES OF THE IRISH CANDIDATES who have passed the Pharmaceutical Assistants' Licence, and Registered Druggists' examinations are named on p. 80.

THE PHARMACEUTICAL SOCIETY, having obtained a judgment against an "unqualified chemist" at Grimsby, tried to enforce it, but they have found that the stock belongs to the defendant's wife (p. 98).

THE PHARMACEUTICAL SOCIETY have failed to satisfy the Bradford County Court Judge that selling a B.P. article not of B.P. quality is an offence against the Pharmacy Act. The Act only refers to compounding (p. 98).

EUCALYPTUS OIL, seidnitz-powders, and boric acid in milk have brought retailers into court under the Food and Drugs Act. Lewis & Burrows are fined in respect to eucalyptus-oil, but they give notice of appeal (p. 101).

MR. D. B. DOTT criticised several of the Pharmacopœia tests at the meeting of the North British Branch. His notes referred to sodium sulphite, eucalyptus oil, and strychnine, and they brought out interesting points (p. 91).

MR. EVANS, the senior partner in Evans, Sons & Co., Liverpool, has narrated many interesting reminiscences of the drug-trade during the past seventy years to the Liverpool Chemists' Association. We give his portrait (p. 86).

IN THE TRADE-REPORT this week the most important item is the advanced price of citric acid. Crude camphor is dearer, so are copper sulphate, castor oil, and saffron. New cod-liver oil is within sight at easy rates, and ergot is becoming abundant. Drug-auctions were held in London on Thursday, and were very heavy (p. 110).



## English News.

*Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.*

### Must be an F.I.C.

At a meeting of the Hove Town Council on January 12, the Sanitary Committee recommended the appointment of Mr. Woodhead, analyst to the East Sussex County Council, as the public analyst for Hove at a fee of 7s. 6d. for each analysis except in the case of samples of water. This was objected to by Councillor Jago, who regretted the committee's recommendation of a gentleman who had no recognised qualifications for the post. A degree in science, he said, was no more a qualification to practise as an analyst than to practise as a medical man or solicitor. The Institute of Chemistry was established for the express purpose of registering, after examination, those qualified to exercise the profession of chemist and analyst. Further, for the proper administration of the Food and Drugs Act a public analyst should show some evidence of a special knowledge of pharmacology, and being himself a chemist he felt strongly on that point. He moved "That in the opinion of the Council its analyst should be recognised as a properly qualified chemist by the Institute of Chemistry, and that the matter be referred back in order that steps may be taken for the appointment of such analyst." Alderman Waring seconded, and Councillor E. J. Willett, in supporting the proposition of Mr. Jago, said that the degree of "B.Sc." was one of science generally and not of chemistry in particular. Mr. Jago's resolution was carried by 19 votes to 12.

### Only the Brand.

Joseph Frost, who is also J. Butt and J. Lee, was again before the Saffron Walden Magistrates on January 10 to answer the charge of obtaining money by false pretences, by selling cigarettes which it is alleged he represented were a remedy for bronchial complaints. The Treasury prosecuted, and witnesses who had purchased the cigarettes from accused stated that he represented them as "Eucalyptus Cigarettes." An analysis by Mr. Pooley showed that they contained neither tobacco nor eucalyptus, but consisted of the crushed leaves of various herbs, chiefly stramonium. Prisoner stated in defence that he did not represent that the cigarettes contained eucalyptus oil. "Eucalyptus" was merely the brand, and they were sold as herbal cigarettes. Accused was committed for trial.

### Fire.

A serious fire took place on January 13, in the premises of Messrs. Harrison & Waide, medical-label printers, Leeds. The outbreak originated in the main building, the two upper storeys of which were entirely destroyed, and the ground-floor, in which are printing-presses and other machinery, was considerably damaged by water and smoke. The fire-brigade were at work for an hour and a half before the flames were subdued, and by that time damage to the extent of about 7,000% was done. Between 80 and 100 workpeople are thrown out of employment, but the firm will endeavour to resume work in temporary premises in about a week.

### A Matter of Consequence.

At a meeting of the Medway Board of Guardians held at Chatham, on January 12, Mr. T. C. Lamb, pharmaceutical chemist, Chatham, who is a member of the Board, drew attention to the fact that the workhouse-master had ordered  $\frac{1}{2}$  cwt. of carbolic powder from a London firm, when it might have been obtained in the town. The master explained that the powder had been obtained from London for some time, but the Chairman reminded him that it was the express wish of the Guardians that goods should be obtained locally whenever possible. The master said it was a matter of no consequence, but the Chairman retorted that it was of considerable consequence.

### Chemist's Shop-front Damaged.

On January 11, a runaway horse, yoked to a butcher's cart, crashed into the shop-front of Mr. D. Evans, chemist

Maindee. The shafts of the vehicle were broken off and the driver thrown out, but was uninjured. Mr. Evans's premises were considerably damaged.

### Abortionist's Second Sentence.

At the Central Criminal Court, on January 16, George Hare, describing himself as a herbalist, was found guilty of using an instrument with intent to procure abortion, and sentenced to twelve years' penal servitude. Particulars of the case were given in our issue of December 24, p. 997. It was stated that prisoner, in 1889, was sentenced to ten years' penal servitude for a similar offence.

### Bogus Cheques.

At West London Police Court, on January 13, a man, giving the name of William Macdonald, was charged, on remand, with obtaining money by means of worthless cheques. Amongst the victims was Mr. William Topling, chemist, King's Road, Chelsea, who was induced to cash a cheque for 3s. by prisoner representing himself to be the nephew of a well-known doctor in the locality. The prisoner was committed for trial.

### Poisoned by Aconite.

A man named Alfred Thomas Brooks, living in Bedford Row, who was suffering from asthma and rheumatism, had been supplied by Dr. Reginald Taylor, of Gray's Inn Road, with a quantity of aconite liniment with which to rub his chest. Brooks drank the liniment instead, and the Coroner's jury were of opinion that it was a case of suicide during temporary insanity.

### A Laudanum-drinker's Death.

At an inquest held at Whitehaven on January 16, on the body of Mary Hetherington, it was stated that deceased had been in the habit of taking laudanum for over forty years. Lately she had taken sixpennyworth a day, and Mr. Allatt, chemist and druggist, from whom she had purchased the drug, had refused to supply her any longer. Deceased then said that if she could not get laudanum she would go mad, and almost immediately afterwards she cut her throat.

### A Serious Charge.

At Huddersfield Police Court on January 16, Ernest Radcliffe Swift (24), described as a chemist, was charged with having assaulted Mildred Bertha Stark, a girl of 13 years of age. Evidence was given by the girl herself and her step-mother. In the course of the girl's evidence she admitted careless behaviour with a gentleman while at a boarding-school. Accused was committed for trial, bail being allowed.

## Irish News.

*Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.*

### Fell from a Scaffold.

Mr. John S. Anderson, chemist, Lisburn, while last week inspecting his new premises in course of erection, stumbled on the scaffolding and fell a considerable distance breaking three of his ribs. He is progressing favourably.

### Examination Results.

*Pharmaceutical Assistants' Examination.*—The following passed:—J. Hartrey, J. Wilson, M. Dempsey, L. W. Longmore, A. C. Loton.

*Registered Druggists' Examination.*—The following passed:—H. J. D'Arcy. One candidate was rejected.

*Pharmaceutical Licence Examination.*—The following passed:—D. C. McDougall, W. G. Stratton, E. Barnes, F. Harpur, C. Fairweather, T. L. Foster. Nine candidates were rejected.

### Charge of Burglary.

At the Kingstown Police Court on January 16, a young man named Lantiss was charged with having on the previous Friday night broken into the premises of Messrs.



Hayes, Conyngham & Robinson (Limited), pharmaceutical chemists, Blackrock, with two other men not in custody, and stealing from a safe money to the amount of 6l. The manager of the shop deposed to finding several articles scattered about the place next morning, and the money gone from the safe. The accused was remanded, and warrants issued for the arrest of two other men supposed to be implicated.

#### Feeding the Pharmacist.

At a meeting of the Limerick Guardians last week the question of allowing first-class rations to Mr. Hance, L.P.S.I., apothecary to the Union, was discussed at considerable length. Some guardians thought Mr. Hance was getting a large salary and should not receive the allowance. The Chairman said it was a very small concession. Mr. Hance was one of their best officers and could save them a lot of money. Eventually it was resolved to allow rations to Mr. Hance, one of the guardians protesting and stating that he would take the matter to the proper quarter.

#### The Pharmacist to the Rescue.

A man named Lanrence Ryan, who was shot at Thurles fair on January 10, was taken to the Cork workhouse hospital, where an exhaustive search was made by the medical staff for the missing bullet. It could not be found, and Mr. Richard Sumner, pharmaceutical chemist, who possesses a perfect x-ray apparatus, was communicated with. Mr. Sumner went to the hospital, and for three hours and a half investigated the wounded man's internal economy, but could discover no trace of a bullet. The wound, which was directly in line with the heart, was then closely examined, and the rays clearly showed that the bullet had not penetrated the body at all, but had glanced off the rib, which was indented, and must have lodged somewhere outside.

### Scotch News.

*Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.*

#### Died in the Chemist's Shop.

On January 14 a man who said he was feeling unwell entered the shop of Mr. S. Boyd, chemist, Annan, for something to relieve him. Before he could take a seat, however, he fell dead on the floor from heart-disease.

#### Fire.

A fire broke out in the premises of Messrs. R. Lees & Co., wholesale druggists' sundriesmen, 32 Stockwell Street, Glasgow, on Monday afternoon. The fire originated in the manufacturing-department, and was caused by the ignition of some paraffin. The damage amounts to 100l., including over 300 gross of willow boxes. The fire-brigade arrived just in time to save a large quantity of bulk perfume from being ignited.

#### A Chloroform Explosion.

On Friday, January 13, a somewhat alarming explosion occurred at the chemical and pharmaceutical factory of Messrs. Duncan, Flockhart & Co., South Capongate, Edinburgh. The explosion appears to have been more alarming and exciting than damaging, and was caused by the bursting of a steam-pipe connected with a chloroform-still, and the consequent concussion of air burst the windows of the premises. Some of the employes were knocked about, but nobody was injured.

#### Benzoline Fire.

On January 14, a cask of benzoline which stood in an entry adjoining the premises of Mr. W. M. Ferrier, chemist, Brechin, began to leak and the contents ran into the street. Some one passing threw down a lighted match and the benzoline went ablaze. The fire spread over the pavement and ignited several casks of the same inflammable material, and some crates of straw that were lying about. The flames were fortunately extinguished before any serious damage was done.

#### Pitkeathly.

An action is pending between the Pitkeathly Wells and Mineral-water Company and Reid & Donald's Pitkeathly

Table-water Company (Limited). The first-named company claim to have the sole right to the term "Pitkeathly" for mineral waters, by virtue of a lease of the Pitkeathly Wells they hold. The defendant company, on the other hand, say that the firm of Reid & Donald, and their authors, have for many years manufactured and sold aerated water under the name "Pitkeathly Water." The grantor of the lease to the pursuers, they say, had no right to confer upon his lessee exclusive rights to the use of the word "Pitkeathly," as he did not himself possess such rights.

### Welsh News.

*Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.*

#### Stealing from a Chemist.

At Tredegar Police Court last week, two boys, named William Phillips (11) and Charles Dwyer (9) were charged with stealing a sovereign from the counter of Mr. C. J. Black, chemist, Tredegar. Mr. Black was paying a bill, and placed the money on the counter. He left the shop for a moment, and on returning the coin had disappeared. When charged by the police Phillips admitted slipping into the shop and snatching the sovereign. He was ordered six strokes with the birch and three days' imprisonment, and Dwyer got three strokes and one day.

#### A Freak.

Mr. Brigstocke, chemist, Carmarthen, has forwarded to a local paper a parsnip which he found had grown through a segment of the vertebra of some animal, probably a sheep. The seed seems to have sprouted through the cavity of the bone once occupied by the spiral cord, and on either side of the neck the vegetable has developed to full maturity.

### The Fatal Dispensing Error in a Doctor's Dispensary.

THE report which we published last week of an inquest held at Heaton Norris, concerning the death of a doctor's patient in consequence of the doctor's dispenser putting 50 gr. of morphine in a mixture, instead of 1½ dr. of liquor morphinæ, was of great importance. We have, therefore, obtained an exact copy of the Coroner's depositions in the case as far as these relate to the evidence of the doctor and of the assistant.

Thomas Greenhalgh: I am a surgeon practising at Heaton Norris. I was first consulted by the deceased a week ago last Friday, when she came to my surgery. I found her suffering from epidemic influenza, and I ordered her home to bed. I subsequently saw her daily, and prescribed medicine for her during the following week. During the week I prescribed medicines to reduce the temperature and relieve the cough. On Thursday night I ordered her 8 gr. of Dover's powders, which contain nearly 1 gr. of opium. That gave her about two hours' sleep, according to her own statement. On Friday I prescribed 5 gr. of phenacetin. On Saturday, December 21, I found she had had no sleep, and her cough was very irritable. I considered it necessary, therefore, to prescribe a preparation consisting of 4 gr. acetate of morphia, 8 drops of prussic acid, mucilage with syrup, and add to these 4 oz. of water. My dispenser, Mr. William Cheadle, a medical student, made up the medicine from a partially written and partially verbal prescription. The slip of paper (produced) contains the written portion of the prescription, and is as follows:—

"Broderick.—Linct. morphia acid hydrocyan. acacia and syrup."

There were no quantities marked on the prescription then. When I gave it to Mr. Cheadle I told him verbally to put 1½ dr. of the liquor morphia, which would contain 1½ gr. of morphia, and at the same time I told him to make it into ½ pint, which I marked on the prescription. I then left it to him



to be made up until called for. The quantities now marked on the prescription, signifying  $1\frac{1}{2}$  dr. of liquor morphia and 8 drops of prussic acid, were put in by me at the time I gave Mr. Cheadle directions. At about half-past 5 on Saturday afternoon the deceased's father came to the surgery. He brought the bottle of medicine with him, and I took about a tablespoonful myself. My suspicions were aroused at the taste of it. I thought it was more bitter than it should have been. I went to the deceased at once, and found her in a comatose condition. The pupils of the eye were contracted, and she was livid. The breathing was stertorous, and the limbs relaxed. The lips were blue. My suspicions were aroused, and I came to the conclusion that she was under the influence of opium, but if she had only had the quantity I had ordered I expected her to rally. I instructed the relatives how to act, and saw her again three or four times afterwards. At no time was there any real improvement. I saw Mr. Cheadle at the surgery at half-past 6 in the evening, and questioned him as to the medicine, when he told me he had put in 50 gr. of morphia, but the other ingredients as prescribed. I said, "What do you mean by it?" and he replied, "I cannot tell how I came to make such a blunder. I feel very, very sorry it has happened." I saw Cheadle between 3 and 4 o'clock in the afternoon. He appeared quite sober. I knew he had been taking antipyrin. I was present when the deceased died, at about 10 o'clock on Saturday night. I am satisfied that deceased would not have died when she did but for the overdose of morphia, but I think her condition would have had something to do with it. In the dose which the deceased took there would be 6 gr. of morphia. The smallest dose I have ever known to cause death in a healthy person was 4 gr. Mr. Cheadle has been about twelve years connected with medicine. He has been over three years with me and five years with Dr. Kennedy, of Stretford Road, Manchester. I cannot imagine any man of his experience putting 50 gr. of morphia in the medicine. I have never seen Cheadle the worse for drink, but I have seen him moody. I am not aware he was in the habit of taking drugs. Cross-examined by Mr. Grace: Deceased was decidedly in a serious condition before taking the medicine. Her temperature on Saturday morning was, I believe, 103, 104, or 106. Cross-examined by Mr. Briggs: I have not put the word "liquor" before the "drachm and a half" in the prescription, but the word "linctus" would be understood to be 4 gr. to the 8 oz. Cheadle has made up the same linctus prescription many times. I know that Mr. Cheadle has had trouble at home.

Walter Cheadle: I am a medical student, and reside at 12 Heaton Road, Heaton Norris. I have had twelve years' experience in dispensing medicines, and have been three years and three months in the service of Dr. Greenhalgh. Dr. Greenhalgh handed me the slip of paper just as I was leaving him in Wellington Road, after having seen several patients. At the same time he gave me verbal instructions to make up for the deceased 4 oz. of linctus of morphia. At the moment the doctor changed it, and told me to make it into 8 oz. instead of 4. The signs for a "drachm and a half" and "8 drops" were in when he gave me the prescription. I was not quite sure, from the prescription and the verbal alteration from 4 oz. to 8 oz., of the dose to be taken. There is a faint mark in the prescription, meaning two tablespoonfuls, which I saw at the time. I do not recollect that the doctor told me that the drachm and a half was to be "liquor morphia." The word "liquor" is not in the prescription, and the word "linctus" led me to believe it was to be a liquid preparation made from the powder morphia. I did not know perfectly, from the prescription, what amount of morphia was to be put in the medicine. Neither the word "linctus" nor the sign for a "drachm and a half" assisted me. I worked at the prescription as well as my mind would allow in the condition I was then in from the effects of taking antipyrin. In dispensing the medicine I weighed out 50 gr. of morphia and  $\frac{1}{2}$  oz. of gum acacia. I then added 8 drops of prussic acid and syrup. I mixed these up in a mortar, put it in a bottle, and added water to make 8 oz. I put the label on with directions, and wrapped the bottle up in paper and put the deceased's name on, and left it until it was called for. I calculated the 50 gr. of morphia by having always dispensed teaspoon doses before. There would have been

then  $\frac{2}{3}$  gr. in each dose of a teaspoonful. It did not occur to me to calculate what amount of morphia there would be in the two tablespoonful until the doctor spoke to me about the medicine at 6 o'clock in the evening. I then found out that I had made a mistake about the tablespoon dose. The sign for  $1\frac{1}{2}$  dr. did not assist me. I made up all the medicine which the deceased had had previously. They were all two-tablespoonful-doses. I have no recollection of the doctor telling me to put in  $1\frac{1}{2}$  dr. of liquor morphia. I disregarded the sign for a "drachm" and a half altogether, and made up the medicine upon my own calculation. I have never before put 50 gr. of morphia in any medicine or preparation, nor have I ever seen a prescription containing that quantity. I was suffering from neuralgia at the time, and had been all the week end, and I was not fit for work. By Mr. Briggs: The word "linct." in the prescription means "linctus," and this means in turn a cough-mixture, and nothing more, and has no significance as to quantity. I have never made up a prescription before which contained morphia in a larger bottle than 2 *oz.*, and the doses have always been a teaspoonful. I took it that the powder morphia was to be used. A drachm and a half would contain 90 gr. There were only 50 gr. of morphia in the bottle, and I weighed out the whole quantity. I reckoned out the quantity by taking teaspoonful doses as a basis. There would be sixty-four teaspoonful doses in an 8-oz. bottle, and, therefore, the 50 gr. which I put in would yield less than 1 gr., about  $\frac{2}{3}$  gr. per dose. I have no recollection of ever using liquor morphia. Eight-ounce bottles are generally used for tablespoonful doses. If my head had been clear I should have put in liquor morphia in the quantity of  $1\frac{1}{2}$  dr.

## New Books.

Any book named in this list can be supplied post-free to any part of the world on receipt of the published price by the Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

Adams, W. I. L. *In Nature's Image: Chapters on Pictorial Photography.* Large 8vo. New York. 12s. 6d.

*American Annual of Photography for 1899.* 9 $\frac{1}{8}$  x 5 $\frac{3}{8}$ . Pp. 370 2s. (Dawbarn.)

Austin, J. A. *Manual of First Aid: a Text-book for Ambulance Classes.* Illus. 7 $\frac{3}{8}$  x 4 $\frac{3}{8}$ . Pp. 216. 3s. 6d. (Low.)

Barwise, S. *The Purification of Sewage.* 7 $\frac{1}{2}$  x 4 $\frac{7}{8}$ . Pp. 162. 5s. (Lockwood.)

Deventer, Ch. M. van. *Physical Chemistry for Beginners.* Pref. by J. H. van 't Hoff. 7 $\frac{1}{2}$  x 5. Pp. 162. 2s. 6d. (Arnold.)

Dowse, T. S. *Treatment of Disease by Physical Methods* 5 $\frac{1}{2}$  x 8 $\frac{1}{2}$ . Pp. 412. 7s. 6d. (Wright.)

Dymond, T. S. *An Experimental Course of Chemistry for Agricultural Students.* 7 $\frac{1}{2}$  x 4 $\frac{3}{8}$ . Pp. 192. 2s. 6d. (Arnold.)

Gant, F. J. *Guide to Examinations of the Conjoint Examining Board in England and for Diploma of Fellow of Royal College of Surgeons of England.* 6 $\frac{3}{8}$  x 4. Pp. 252. 5s. (Baillière.)

Hawkes, H. P. *Photography in a Nutshell.* 24th Thou. 7 $\frac{1}{4}$  x 4 $\frac{3}{8}$ . Pp. 160. Sewed. 1s. (Iliffe.)

Hogg, J. *The Microscope: its History, Construction, and Application.* 900 Illus. 15th ed. Re-wr., enl. 9 x 6. Pp. 728. 10s. 6d. (Routledge.)

*Holden's Human Osteology.* 8th ed. By C. Stewart and R. W. Reid. 9 $\frac{3}{4}$  x 5 $\frac{3}{8}$ . Pp. 368. 16s. (Churchill.)

Lowson, J. M. *Text-book of Botany* 7 $\frac{1}{4}$  x 4 $\frac{3}{8}$ . Pp. 402. 6s. 6d. (Clive.)

*Medical Directory for 1899.* 55th issue. 8vo. 14s (Churchill.)

Murrell, W. *Aids to Materia Medica. Part 2: Drugs of Vegetable Origin.* 6 $\frac{3}{8}$  x 4 $\frac{3}{8}$ . Pp. 134. 2s. (Baillière.)

"THE CHEMISTS' AND DRUGGISTS' DIARY arrived last week" (writes a Mafeking correspondent on December 19, 1898), "and is full of useful information as usual."



## French News.

(From our Paris Correspondent.)

**DOCTOR OF PHARMACY.**—The University of Montpellier, following the Parisian example, has decided to grant the degree of doctor of pharmacy.

**OBITUARY.**—The death is announced of M. Herland, pharmacien, at Concarneau, Finistère, under whose initiative the Co-operative Society for the Manufacture of Iodine was formed.

**ENERGY IN RADIO-ACTIVE BODIES.**—A note by Sir William Crookes was read to the Academy of Sciences on Monday theorising on the source of the radiations from uranium and thorium which will for years reduce silver-salts in the dark. Sir William suggests that possibly these metals act like filters, allowing slowly-moving atmospheric molecules to pass through them.

**DENATURISED ALCOHOL.**—The decree which came into force in June of last year, under which denaturised alcohol bearing a duty of 3 fr. per hectolitre may, under certain conditions, be used in place of pure alcohol bearing 37 50 fr. per hectolitre, does not give the drug-trade much satisfaction, because the conditions are felt to be too stringent. For instance, retailers may not sell more than 20 litres in one day to the same buyer, and in no other way than original sealed bottles, unless special permission is obtained from the Administration. They must also keep a register of sales as well as purchases.

**"THE DEFENCE OF EUROPE"** was the title given by Professor Proust to a paper read by him at the last meeting of the Paris Academy of Medicine. It referred to the present geographical distribution of the pest in Asia and Africa, and to the danger Europe may run by the development of the malady. He thought the regulations laid down at the Venice Conference in 1897 were sufficient to protect Europe, but suggested that when English shipowners found these or other regulations onerous, they simply ignore them. He told the story of the Indian mail-boat, the s.s. "Caledonia," which was reported to have the pest on board on its way from Bombay in November last. M. Proust thinks that if the disease reaches Europe it will be the fault of the English.

**CO-OPERATIVE PHARMACY.**—There is a decided tendency among French pharmaciens just now to manufacture pharmaceutical products and specialities on a co-operative basis. The latest manifestation is the Société Fédérale des Pharmaciens de France, formed with a capital of 200,000f. (8,000l.) for the purpose of purchasing the wholesale and manufacturing business of M. A. Petit. The company has so far taken over the connection, patents, specialities, &c., and has rented the manufactory for three years. At the end of that time, it has the option of purchasing the works, in which case the capital will be increased. The shares are 100f. (4l.) each, and one condition is that every shareholder shall be a pharmacist—that is to say, a probable customer.

**FRENCH PHARMACY ASSISTANTS.**—"The Syndicate Association of the Pharmacy Assistants of France" held its annual meeting at the Café Yvon, Place St. Michel, Paris, on Saturday, January 14, at 10 30 p.m. There was a good attendance, and the President (M. Jocelyn Robert) occupied the chair. The Secretary's report showed the society to be flourishing, and the Treasurer announced a satisfactory balance-sheet. The seventh annual banquet of the Association was held some days previously at the Tavernier Restaurant under the patronage of MM. Astier, Brunet, and Gerville-Réache, Députés, the two first-mentioned being present. It was a bright function, though tardy, midnight being close at hand when the guests sat down to table. Speeches followed the repast, and M. Robert waxed eloquent over the Society's progress. M. Astier, the deputy, gave an interesting speech, in which he interpolated some amusing anecdotes of his experience as an assistant. He spoke also as a citizen anxious for the interests of the weak and oppressed, and said that pharmacy-assistants can count on his support in the Chamber of Deputies in case of need. An ovation followed his speech, the entire company rising to applaud.

## South African News.

(From our own Correspondents.)

**TRADE IN JOHANNESBURG** is extremely dull for the time of the year, and 1898 has been the worst, generally speaking, since the gold-industry became a factor in the world's commerce. In consequence of the imposition of a tax of 3s. per dozen on all mineral waters coming into the country [reported last week], merchants have promptly agreed to boycott the Quisano Company's water, so the Company may find the tax will defeat its object.

**EVADING SPIRIT-DUTIES.**—The proposed Customs Union between the South African colonies has given rise to a nice trick, based upon the difference between the Natal and Cape Colony spirit-duties (the former is 19s. per case of 2 gals., and the latter 30s.). Wine-merchants in the Cape have been quietly importing goods and placing them into the bonded warehouse at Durban, with the intention of reshipping to the Cape when the Customs Convention comes into force. It was estimated by the Hon. Mr. Logan in the Legislative Council on December 13 that the spirits lying in Natal at present, and intended for the Cape, represent a loss of 45,000l. to the colony.

**NATAL MEDICAL COUNCIL.**—At the November meeting of this Council the police brought under the notice of the members the advertisement of a diarrhoea-medicine, which seems to have offended them. The matter was referred to the Pharmacy Board. The Council is anxious to get native remedies investigated, and Dr. Hyslop reported at this meeting that while in London he called at the Imperial Institute to ask what the scientific department would do in the matter, to which the officials replied that they would be willing to assist the Natal Government, but that the funds at their disposal were very low, and they could do nothing without payment.

**PRESIDENT KRUGER LIKES PEPPERMINTS**, and while presiding over a meeting of the Executive Council at Pretoria one day last month he called someone to go and buy him a shillingsworth. On receiving his sweets from the messenger, who presumably had patronised a chemist, the President became very annoyed, and, turning to his fellow-members of the Council, flourished the parcel of peppermints in the air, exclaiming, "Now, Schalk, do you consider this a shillingsworth?" A general outburst of laughter was the reply, and the President's indignation gradually subsided. Next day a chemist wrote to the *Johannesburg Star*, saying:—

Our worthy President forgot that such a humble product of civilisation bears a special duty of 30s. per 100 lbs. In view of that, I would humbly suggest to his Honour that could he but cultivate the taste for peppermints in the majority of the Raad members, I will then join, or even start, an agitation with some measure of success with the object of having this special duty repealed. Thus his Honour and others will be able to get more peppermints for their shillings.

This is "extra strong" for Mr. Kruger, who is quite fond of laying it hard upon the chemist.

**A CHEMIST'S BANKRUPTCY.**—The examination in bankruptcy of Thomas Hannah, chemist, Maritzburg, was continued at the Supreme Court there on December 21 to 23. The previous examination was briefly reported in our issue of January 7. The bankrupt now admitted having destroyed business-letters and papers, and maintained that when he entered into partnership with M. P. van Breda there was a balance of 519l. in his favour. Although his receipts from May till October 11 were 4,433l., he could only account for 2,721l. The expenditure and cash-book did not show cash expenditure. As to the firm's position, he said it was in difficulty from the commencement. He acknowledged running a horse at the Sporting Club meeting under the name of Harcourt Proctor, and attributed discrepancies in his previous statements to accidental misstatements. At the conclusion of the examination, the Master of the Court expressed his disapproval of Hannah's conduct, saying he had seldom met with a European insolvent who had so little respect for the truth. As Hannah left the court he was arrested on a charge of perjury and offences against the Insolvency Act, but was released on 2,000l. bail.



## New York Notes.

(By the Man from London.)

**SCIENTIFIC POISONING.**—Sir James Crichton Browne's address to the Pharmaceutical Society has caused a sensation here. The daily press has taken it up, and drawn horrible pictures of the new weapons for the use of the burglar and murderer. Counsel for alleged poisoners here have long learned the value of "ptomaines" as a defence, and Sir J. C. Browne's address will give them many additional pointers.

**THE CHINESE** are numerous in this city. I noticed a couple the other day in a railway carriage take out small boxes from their pockets and calmly hand each other a piece of opium the size of a pea, which was swallowed with every appearance of pleasure. In the Chinese quarters, dens known as "opium-joints" exist where the drug is smoked by these impassive-looking Celestials, also, it is said, by white men and women addicted to the opium-habit.

**GRIP** has been very prevalent here this winter, and, consequently, doctors and druggists are busy. The different treatments adopted by medical men for the complaint seem to show they are still in doubt as to a remedy. One fashionable doctor gives calomel in  $\frac{1}{4}$ -gr. doses every two or three hours for a day on the first appearance of the complaint, and follows this with a purgative dose of magnesia or Rochelle salts the next morning. After this he prescribes quinine in 2-gr. doses every four hours. Another doctor gives phenacetin 5 gr. and soda bicarb. 10 gr. every four hours; and here and there a physician of the old school sticks steadily to the good old "liq. ammon. acet." and insists upon his patient remaining in bed for a few days.

**THE WIG-WAG BUG.**—Volunteers returning from Cuba tell some wonderful tales regarding their experiences in the late campaign. Fevers, rainstorms, and starvation are forgotten, however, when compared with their entomological experiences. Tarantulas and scorpions were the most dangerous, and the land-crabs the most disgusting, but the most dreaded was the "fan-tailed little devil with the red-hot sting, which would stand up on its hind legs and wig-wag at you," as one soldier expressed it. These were variously known as the "wig-wag, or signal corps bugs." From the descriptions given this insect seems to have been the praying mantis (*Mantis religiosa*), so called from its method of carrying its pincers. Many of the Volunteers suffered severely from its bite.

**HUDNUT'S PHARMACY** is in the hands of receivers after sustaining steady losses. Its liabilities are \$34,000, and its assets \$27,000. The pharmacy was established on Broadway, New York, in 1870, by Mr. Alexander Hudnut, who continued in charge until 1888, when it was consolidated with the Hegeman Drug Corporation. In 1892 Mr. Hudnut sold out to Messrs. Frederick Anners and George Bancroft for \$200,000. The pharmacy is not a big place, but it is one of the most elegant in existence. The mahogany fittings are in the style of the First Empire, with gilt-brass festoons relieving the broader parts. Only the finest specialties were at one time shown in the front part of the pharmacy (except the soda fountain), and exceptionally long prices were obtained for them. It is this pharmacy which owns a pair of Venetian vases that cost the proprietor \$11,000.

**A MYSTERIOUS POISONING-CASE**, which has caused a greater sensation than any similar crime for years, occurred here during the last week in the old year. A gentleman well known in New York received by mail a bottle of bromo-seltzer, which appeared to have been sent as a sample. The gentleman opened the bottle the other morning, and mixed a dose for a lady living in the same house, who had a headache. Immediately after drinking the draught the unfortunate woman fell to the ground and expired in a few minutes in great agony. It was subsequently discovered that the bottle of "bromo-seltzer" contained cyanide of potassium mixed with the bromo preparation. It may seem strange that a man should use anything sent him without inquiry, but free samples are very common here. The absence of any literature with the bromo-seltzer might have raised some suspicion in the recipient's mind, also the fact of the bottle being enclosed in a box which bore the name of a firm of jewellers, and was posted in New York.

## Australasian News.

From "The Chemist and Druggist of Australasia" for December, 1898, of which copies may be obtained from the Publisher at 6d. each.

**A NEW AND WONDERFUL GAS.**—A little mild excitement has been provided in Hobart lately (writes the *C.D.A.* correspondent in the city) by the advent of a gentleman who wishes to "get off" a little patent of his for making a new gas. My attention was first called to the matter by having the following unique order placed in my hands for execution by a well-known mining "expert":—

$\frac{1}{4}$  lb. resin, 2d.;  $\frac{1}{2}$  gal. gasoline, 1s.; 1 pint of kerosene, 2d.; 1 pint shale-oil, 1d.; 2 tablespoonsfull of ether, 1d.; 2 tablespoonsfull of salt, 3d.; 2 tablespoonsfull of bisulphate (*sic*) carbon, 2d.; camphorated chalk, 3d.; and oil of cloves, 3d.

The prescription was beyond me, and the prices didn't look tempting, so I advised him to try Mr. So-and-So. I heard afterwards that he had got them all, except the gasoline and shale-oil, at the scheduled prices. The next thing I noticed was that a committee had been formed to practically test the matter, and I noticed that Dr. Barnard (Court of Medical Examiners) and Mr. J. B. Hickson (Registrar of Pharmaceutical Society of Tasmania), with a clergyman and some M.H.A.'s, &c., comprised the committee. I went and had a look at the scene of operations, and did not feel tempted to buy shares—rather the reverse. The prescription was too awfully complex for me, and I was afraid the camphorated chalk or the oil of cloves might "go off." The paper next day gave a glowing account of the experiments, but so far Hobart gas-shares are firm, and they have not slumped.

**A LUNATIC'S PRESCRIPTION.**—Below is a copy of a prescription written by a lunatic, and intended for his own use, although apparently for a patient. The writer of it is a qualified medical man, and a patient at the Mount View Asylum, Wellington, N.Z. He escaped recently, and, after pawing a watch, he wrote out the guileless prescription, and

Mrs Collins -



R  
Glycerine 3y  
T Cord Co 3y  
Zp Am An 3y  
The opor ad 3y

7 2  
15  
drops in water long  
two hours or until relieved

A Cockley  
7/11/98

easily got it dispensed by a chemist. He next drank the lot, and found a quiet place in which to sleep off the effects of the opium. The dose did not seem to do him any harm, as three days afterwards he turned up at the Porirua Asylum (a distance of nearly twenty miles from Mount View), and gave a full account of himself.

"'PHARMACEUTICAL FORMULAS' is the best book of formulas in the English language."—*Drug Topics*.



## Colonial and Foreign News.

**THE BORAX-FACTORY** of Schuster & Wilhelmy at Reichenbach, in Silesia, has been burned down. The enclosing wall also escaped.

**ITALIAN SAMPLE POST.**—By a recent regulation of the Italian Minister of Finance it is forbidden to send by letter or sample post gold, silver, silk, or other dutiable articles of value.

**ITALIAN PHARMACEUTICAL ASSOCIATIONS.**—A federation of Italian Pharmaceutical Associations has been formed with headquarters in Rome. Similar attempts have previously been made without success.

**THE POTASH-INDUSTRY IN GERMANY** seems to be in a bad way. The Benthberg works are in liquidation, with assets valued at 8,000m.; and the Osnabrück and Biesendorf works are also in the same position.

**JAPANESE TAX ON PATENT MEDICINES.**—The Japanese Government intend to raise the internal tax on patent medicines by, it is expected, 10 per cent. to 30 per cent. It is also intended to increase the customs duty.

**TRADE-MARKS IN JAPAN.**—The first case under the trade-marks law of Japan, interesting to Europeans, has recently been decided. A German aniline-dye manufacturer sued an Osaka merchant for counterfeiting his trade-mark, but lost the case.

**CULTIVATION OF MEDICINAL PLANTS IN HUNGARY** does not appear to be progressing so well as botanists desire, and they now propose to join hands with pharmacists in an endeavour to further the matter. A conference will be held if the Hungarian Apotheker-Congress agrees.

**HOTEL PHARMACIES IN RUSSIA.**—Proposals have been made to Riga hotel-keepers to establish pharmacies on their premises, in order to afford travellers the requisite remedies in cases of emergency. These pharmacies are to be inspected from time to time by the Sanitary Commission.

**PROTECTING GERMAN PATENTS.**—The Verein zur Wahrung der Chemischer Industrie Deutschlands has petitioned the Imperial Chancellor for effectual protection against the infringement of German patents, especially those relating to synthetic dyes, by foreign (particularly Swiss and Dutch) firms.

**PENNY POSTAGE FOR U.S.A.**—It is reported that American merchants near the Canadian border are now sending their correspondence for Great Britain in bulk to Canada, to be posted there. Detroit, U.S., and Windsor, Ontario, are the points best situated in this way, a river merely dividing them.

**BEETROOT-POTASH.**—It is well known that a large amount of potash-carbonate is obtained as a by-product in the manufacture of beetroot-sugar, and it is largely exported from Germany to, amongst other countries, the United States. In the latter place beet-sugar factories are on the increase, and Americans are looking forward to doing without the German article.

**THE FIRST CHINESE MEDICAL JOURNAL** has just been published in Hong-Kong, under the title of *Monthly Journal of Medicine, Surgery, and Sanitation*. The editor is Wan Tün Mo, who possesses the diploma of the Imperial College of Medicine in Tientsin, and who holds the appointment of physician to the Alice Memorial Hospital in Hong-Kong.

**ADULTERATED POWDERED CARDAMOMS.**—The *Pharm. Zeit.* notes with surprise the acquittal of a druggist in Germany on a charge of selling powdered cardamoms containing 10 to 15 per cent. of ginger. The explanation given by the court was that the adulteration of the spice was effected before its arrival from England, either through imitation of the natural product by means of ginger or in some other manner.

**DRUG-TRADE OF PARA, U.S.**—Consul Kenneday, reporting on the trade of Para, states that the terms of credit given by European houses are so much easier than what American merchants give, that drug-dealers prefer to place their orders

in Europe. They also claim that the packing is more satisfactory. The Consul regrets that not one of the many American druggists who have visited Para during his term of office was able to speak Portuguese.

**SMUGGLING PHENACETINE.**—For some time past the United States authorities have been aware that large quantities of phenacetine have been smuggled into Detroit from the Canadian side of the river. On December 23 they arrested George McMillan, aged 27, an employé of Parke, Davis & Co., and in his trunk in a boarding-house in Detroit 560 oz. of phenacetine was found. McMillan said he got the drug from a man, but the police say it was bought in Toronto, where McMillan's folk reside.

**DUELS BETWEEN HUNGARIAN APOTHEKERS.**—At Nagy-Szöllös, Apotheker Franz Troknya proposed to exclude Mr. Franz Hübner (a Government inspector) from the casino. The result was a duel, in which Troknya was severely wounded. We also learn from the *Zeit. Oest. Ap. Verein* that a duel with pistols took place between Mr. Eugen Bakos, a master of pharmacy, and a Mr. J. Feunesz; the latter was dangerously wounded. The Buda-Pesth Criminal Court sentenced Bakos to twenty days' imprisonment.

**GERMANY IN CHINA.**—The German Government promises that in order to further the development of Kiau-Chau and enable the nascent colony to compete successfully with older commercial firms on the East Coast of Asia, the greatest freedom in trade matters will be granted. An exception will be made in regard to pharmacy, amongst other callings, which will be under supervision, and only licensed persons will be allowed to have pharmacies. Opium will be allowed to be sold in limited quantities, but it will be subject to a heavy tax.

**SALT IN GREECE.**—An effort is to be made to increase the proceeds from the salt monopoly, one of the departments assigned to the International Finance Commission. The amount of salt produced in Greece in 1897 was 1,805,000 okes, which, under State management, cost 192 420 drachmas per 1,000 okes, but the present concessionaires produce the same quantity for 117,385 drachmas. So far, only sufficient salt has been produced for home consumption, and this of inferior quality; but the hope is now expressed that more can be made and better at a cost of less than 10¢ per ton, so that it would be possible to export Greek salt to the Balkan States, which at present buy Italian salt.

**TRICKS OF THE TRADE.**—A Bombay firm recently imported 132 bottles of tablets, valued at 235r., which bore labels stating that they were "Santonin worm-tablets made in Germany." Samples of these tablets were sent to the Government analyst, who reported that they contained practically no santonin. The trade description was, therefore, held to be false, and the importer was requested either to re-ship the goods to Hamburg after paying a fine of 150r. or have them confiscated. He preferred the latter alternative, and the so-called worm-tablets were confiscated and destroyed. A similar consignment, labelled "Santonin Anthelmintic Bonbons, made in Germany," valued at 465r., was dealt with in the same way, but the goods in this case were re-shipped to Hamburg, and the fine of 150r. paid.

**THE LINSEED-OIL TRUST.**—Further particulars are to hand regarding the American Linseed Company, which has absorbed most of the linseed-oil concerns in the United States (see *C. & D.*, December 17, page 964). It appears that none of the officers or directors of the company are men prominent in the business in which the combination is to engage. The majority of the directors are lawyers, six of them being connected with the law-firm which drew up the incorporation-papers. The company has already perfected agreements through which it will have control of over 80 per cent. of the linseed-oil production of the country; its operations, however, are not of necessity to be confined to even this large area. The preferred stock of \$16,750,000, representing half of the total authorised capital, is to carry a dividend of 7 per cent., beginning March 1, 1899, but is to be non-cumulative. The most striking characteristic of the charter is the giving of practically all power into the hands of the directors, who can, without the assent or vote of the stockholders, make, alter, amend, and rescind the by-laws of the corporation.



## The Winter Session.

### Liverpool Chemists' Association.

The annual meeting of this Association was held at the Royal Institution on January 12. The retiring President (Mr. John Bain) was in the chair, and there was a large attendance.

The Council's annual report indicated that much active work had been done. A new edition of the Price-list was brought out in November last, and 391 copies had been sold. The present strength of the Association was 120 (four more than a year ago), and the Treasurer reported a balance in hand of 10*l.* 14*s.* 3*d.*

A ballot was then taken for members of Council, and the result was as follows:—C. Symes, W. Wellings, T. F. Abraham, Harold Wyatt, jun., J. Hocken, R. Stockdale, J. H. Swinton, C. J. S. Thompson.

Among miscellaneous questions, Mr. R. C. COWLEY asked the opinion of the members as to the necessity of registering sulphocyanide of ammonium as a poison. The general impression seemed to be that it was not necessary to register it.

After votes of thanks had been passed to the retiring President and the officers of the Association,

Mr. JOHN J. EVANS, in the absence of his father, Mr. Edward Evans, the newly-elected President for the current session, read that gentleman's inaugural address, entitled,

"SEVENTY YEARS' REMINISCENCES OF THE DRUG-TRADE."

Allow me first of all to thank the members of your Association for conferring upon me again the honour of presiding over your meetings—an honour which I held for the first



EDWARD EVANS, ESQ., Deputy-Lieutenant of the County of Denbigh.

The Deputy-Lieutenancy was conferred on Mr. Evans three years ago, when he was High Sheriff of his County, by the Lord-Lieutenant of the County. It is a life appointment.

time early in the history of the Association. And then permit me to thank you for asking me to give the recollections of my connection with the drug-trade. But in this latter case you will readily understand that a very wide field

is covered by remembrances of London, that carry me back to the time when I was a boy in the crowd that stood near London Bridge to see that now historic structure opened by King William the Fourth; and also by recollections of Liverpool that are associated with trips to Bootle in order to spend a day on the sands at the seaside. It would be impossible, even within the compass of a book, to do anything like justice to the subject, and therefore you will have to be content with a *resumé*, more or less fragmentary, of the leading points which come back to me after the lapse of many years.

After passing through the usual school experiences of the youth of the day, I was apprenticed to my father in 1830. As was frequently the custom in those days in London, I was bound to my father through one of the London companies—namely, the Musicians' Company, another wholesale druggist, Mr. Herring, having induced my father to become a member of that body. The indenture is such a quaint document that I venture to give you the text of it:—

This indenture witnesseth that Edward Evans, son of John Evans, citizen, musician, of London, doth put himself apprentice to his said father, John Evans, to learn his art, and with him, after the manner of an apprentice, to serve from the day of the date hereof until the full and complete term of seven years from this next following to be completed and ended: During such term the said apprentice his said master faithfully shall serve; his secrets keep; his lawful commands everywhere do. He shall do no damage to his said master, nor see it be done by others, but that he, to the utmost of his power, shall let or give warning to his master of the same. He shall not waste the goods of his said master, nor lend them unlawfully to any. He shall not commit fornication, nor contract matrimony within the said term. He shall not play at cards, dice, tables, or any other unlawful games whereby his said master shall have any loss. With his own goods or others during the said term, without licence of his said master, he shall neither buy nor sell. He shall not haunt taverns or playhouses nor absent himself from his said master's service day nor night unlawfully, but in all cases, as a faithful apprentice, he shall behave himself towards his said master and all his during the said term, and the said master, in consideration of the natural love and affection which he hath for his said son, and also in consideration of 5*s.* stg. of lawful money of Great Britain, being the money given with his said apprentice, his said apprentice in the art and mystery which he useth by the best means that he can shall teach and instruct, or cause to be taught and instructed, finding to his said apprentice meat, drink, apparel, lodging, and all other necessities, according to the custom of the city of London.

During the said term for every true performance of all and every the said covenants and agreements either of the said parties bindeth themselves unto the other by these presents, in witness whereof the parties above named to this indenture interchangeably have put their hand and seals the 28th day of June, in the first year of the reign of our Sovereign Lord William of the United Kingdom of Great Britain and Ireland, King, Defender of the Faith, in the year of our Lord 1830.

JOHN EVANS,  
DANIEL WOOD,  
Clerk.

J. J. SKILBECK,  
Master.

Well do I remember the first day I donned the apron and began my experiences in the dry-room. My first task was to pick gum. To render this operation more congenial, I found a barrel, which was utilised as a temporary seat. Shortly after my father came round, and strongly protested against such an easy-going way of doing business, which would lead to no good end. The barrel was banished as a seat, and the gum was finished by the youthful apprentice in a standing position. This kind of work was all done by men or boys, as my father had no faith in having any "petticoats," as he called them, about the place in those days. This austerity on the part of the head of the firm was manifested in other directions—he thought no one should read anything but the *Pharmacopœia*, or works of a kindred nature. Now, my brother John was a great reader, and once, when caught in the act of reading the poet Byron, he was severely reprimanded, and told that if he were caught again the book would be thrown behind the fire.

The wholesale trade claimed all my attention until 1833, when I was again bound apprentice, this time to a retail druggist at Poplar, named Talbot, who had been in my father's employ, and who was thought a capable teacher of



the mysteries of the retail trade. Here I stayed nearly twelve months, learning much that was of great service to me in after life. At this place I had to work "like a nigger," do all the heavy work of the shop, work from 8 A.M. to 10 P.M. every day, with one Sunday off in four, and on this occasion had to walk from Poplar to the other side of London to dine with my father, and then walk back again at night. Once, when left in charge of the establishment, a sailor entered and complained that he had a pain in his stomach and wanted a remedy at once. Unwilling to display my ignorance, and anxious for the credit of the shop, I at once made up a mixture consisting of aqua pura and syr. rhœados. It looked nice, and I charged my patient 1s. Like the Scotchman, "I had my doots" about that prescription, which were not lessened when the shadow of the man darkened the door of the shop on the day following. Imagine my relief when he blurted out that he had called to thank me for the medicine I had given him. On thinking the matter over, I came to the conclusion that there was probably some virtue in my having charged him a shilling.

While entering fully into the work of the shop, there was one thing I detested—that was the weighing of 1-lb. parcels of ground alum, which we used then to sell to bakers for whitening the bread—a practice very common in those days.

About this time, my father recognised the advantage of Liverpool as a centre for developing the Welsh and north trade. He came to Liverpool to investigate, and boasted on his return of having travelled between Liverpool and Manchester on the new railway. Whether he was on the train by which Huskisson was killed I cannot say, but I know the incident was referred to fully by him on his return. At the end of about twelve months it became necessary for me to come to Liverpool, and at the Christmastide of 1833 I turned my steps toward that city to join the business started by my father in 1833 and carried on by my brother John. I left Talbot with a measure of regret, as we had been good friends. I had a letter from him written shortly after coming to Liverpool, telling me of the completion of the pier and new hotel at Poplar, and in which he congratulates me on the success of the Liverpool house. Seeing that the house had only been established months, not years, his congratulations in light of later events were not at all premature. I have also a copy of my reply, and I find that I recommended him to take a partner—he was a bachelor. When I read the letter now, and remember that I was only a stripling then, I am rather shocked at my temerity. Still, I cannot help feeling, even after the lapse of years, that the advice was good. In his letter he alludes to an attraction he has added to his shop—namely, a gas-lamp on the counter, put in at my suggestion—and in a quaint way he says the novelty had been a success.

On the journey down, as it was Christmas time, I took a holiday with some relations in Shropshire, and on presenting myself at the office found that my father considered the time had been ill spent; a holiday was not to be thought of at that time. My brother and myself had to be everything—invoice-clerks, returns-clerks, ledger-clerks, and be ready to do everything. My father often kept us late to post up the books and make out invoices. Well do I recall my father's jubilation over the first entry in the Liverpool journal of the account of a man named Wood, of Dale Street, a name which remained a long time on our books.

Those were the days of long hours. We began at 6 A.M. in the warehouse, and went on until 8 at night. Wetmen, drymen, and packers had half an hour for breakfast, one hour for dinner, and no other break until work ceased at 3 P.M. There were no summer vacations, no Bank-holidays, no Saturday half-holidays. This, as you know from experience, is now all changed, but I am glad to say we led in this direction, and, as a firm, have again and again shortened hours and lessened work to the advantage of all concerned. Once I remember Gladstone (then a young man) gave a lecture at the Literary and Philharmonic Society, and I managed to find time to hear him. I had the pleasure of reminding him of this fact at Wrexham only a few years ago. I may say here that little or no work was done before breakfast—namely, 8 A.M.—beyond dusting the counters and other light work.

In thinking of the enormous changes which have taken place, it must be remembered that when I commenced my

business career there were no railways, no telegraphs, no telephones, no typewriters, no penny post, few "post" orders. The invoices had to be written, and then put into the hamper with the goods. The chief means of conveyance in those days was the coach, with its characteristic driver and guard, beloved of Dickens and redolent of Weller. On some of the coach-routes it was possible to visit a series of small towns in the day, and by a judicious "tip" to the guard it was quite feasible for a coach to be kept in a town while the traveller visited all his customers, the protests of the other passengers notwithstanding. I remember one such journey Whitehaven way. The commercial travellers used to see much of each other, and on my journeys very frequently did I see faces at the table that I had met before that journey under similar circumstances. A van ran between Liverpool and London carrying goods only, and took two or three days to complete the journey. Heavier goods went by waggons or canals, while the coasting vessels carried many packages to the towns near the coast. The last-named method of transit was very irregular, as I have known goods to be delayed fully six weeks waiting for a vessel to carry them to their destination. Speaking of means of transit reminds me that on one occasion I saw the first 'bus run in London—Shilliback's [? Shillibee's—Ed.]—and hurried with others to a shop-door to see the novelty pass—a lumbering 'bus with three horses abreast—a sight which caused great crowds to assemble, as the motor-cars do to day.

Those were the days for orders. Druggists had to lay in much larger stocks than now. One of my clearest recollections of these matters is the starting of the mail-coach from Old Post Office Place, then Post Office Place. This Royal Mail, in all its glories of paint and red-coated driver and guard, used to leave at 4 or 5 o'clock in the evening, reaching London the next day towards nightfall, and my father often used to travel by it in his journeys north and south.

Clear-cut and sharp in my memory are the incidents of the American War, and its effects on Liverpool life and trade. While it produced the direst results among the cotton-operatives and others engaged in the spinning and weaving trades, it was a harvest time for many trades, and, among others, that of the chemist and druggist. Everybody in Liverpool was for the South, and we shared in the trade which arose through the running of the blockade. Supplies for the Confederate army had to be obtained somehow, and Liverpool came in for a large share of the traffic. Orders amounting to 8,000*l.* and 10,000*l.* worth of drugs, bandages, lint, and medical comforts were not infrequent, and just before the war closed we shipped a large line which had to be brought back to Liverpool. The goods were sold at auction, and realised such full prices that there was no loss to the Confederate agents. This we considered a distinct compliment to the suppliers of the preparations. One fact connected with this period lingers in my mind a little unpleasantly. When the Southern cause seemed in the ascendant, we were induced to accept a number of Confederate bonds as a guarantee for an order which an enthusiastic Southerner placed in our hands, with a result that can be easily imagined;—we still have those bonds, I believe, somewhere.

To-day, when I look at your price-lists, I am amazed at the enormous number of preparations, synthetic and otherwise, which have been introduced since my time. The advent of quinine at 2*l.* to 3*l.* per oz. was an important event, and to-day I understand you reckon the price at pence per oz. instead of pounds. Borax was also new at that period, and the price asked was astounding compared with the figure ruling now. Its use was limited in the extreme, and now you tell me that its uses are too manifold to be enumerated, ranging from the glazing of pots and pans to the killing of cockroaches. Opium was then an important drug as it is to-day, but we had none of its alkaloids to bother us, and no tests as to its strength to worry the druggist. It was simply judged by its appearance, and everything depended on the acumen of the dealer as to what he was getting. Among other articles bought and sold in this way was scammony—an esteemed drug at that time. Elegant pharmacy was in its infancy, and the blue-pill followed by a black-draught was considered a remedy beyond compare by nearly everybody. During my experience, podophyllin was introduced under the name of "vegetable mercury," and seems to have held



its own, while many of its contemporaries have gone out of existence to be remembered no more.

In these days of the Norwegian and Newfoundland fisheries many pharmacists will be interested to know that we used to do a very large trade in cod-liver oil made from livers pressed by ourselves; 15% to 20% used to be paid by us every week in the season for the true fresh livers, and well do I remember the process of pressing, especially the smell. We once managed to sell a quantity of the exhausted livers to a farmer for use as a fertiliser, but he never came back for a further supply; evidently the land cared for it no more than we did. Rhubarb was an important article with us in those days, and truly a change has taken place in our method of procuring it. The finest so-called Turkey rhubarb used to come from Russia, and was bought in condition known as "trimmed" when we got it. Undoubtedly the quality was choice, but for some reason the source of supply from that direction stopped, and we had to take the untrimmed variety from China direct, and that description has held the market since. It was said of some wholesale druggists that they supplied in those days all grades of powdered rhubarb from the same bin, and there is reason to fear that in some cases the rumour was justified. Trimmed rhubarb was largely used by dandies and fashionable people, who used to constantly carry small pieces in their pockets. In addition to the nibbling of rhubarb, there was also a craze for taking whole mustard-seed as a liver-stimulant; it used to be carried in small pouches, and was taken by the teaspoonful. Of leeches I need say nothing, except that, as you know, they have fallen from their high estate, and the leech-jar is now no longer an important item in our stock. Blistering was an institution of which much less is heard to-day than in years past, when the leech and blister were the most popular remedies in the hands of the family practitioner, and when the chemists' showcases exhibited choice assortments of heart-shaped blisters of all sizes. The use of mercury in many forms was distressingly frequent, and much suffering was caused by its abuse as a medicine.

What the world did for pills seventy years ago I cannot imagine when I see the enormous mass of machinery we now employ, and think of the millions turned out by ourselves, to say nothing of our important contemporaries. We used to consider it a good line to sell a pill-machine to make twelve or twenty-four pills—always 5-gr., as only one size was then made. Long lines of huge percolators, such as I see in our laboratories, would have found no use with us when I travelled, as nearly every druggist made his own tinctures, and to such an extent was this done that my own father, notwithstanding his keen eye for business, was opposed to our having any laboratory-work done on the premises. Truly a mighty change has taken place in the last sixty to seventy years.

Opening a new account is always a delicate operation, and glad is the heart of the traveller when he has a novelty that takes the popular fancy. Such a line came to me in a form which will amuse the modern mind. Lucifer-matches were only just introduced, and were a source of great wonder to the public, so long dependent on the flint and steel of the tinder-box. We secured the importation into Liverpool of these lucifer-matches, or "St. Romers" as they were called, and I found them exceedingly valuable in opening many new accounts on my journeys.

Few alkaloids were known in the earlier part of my career, and the crudest methods were adopted in employing such preparations as ext. bellad. so as to get the benefit of the active principles. Prior to the invention of chloroform by Sir James Simpson, which was first manufactured by Duncan, Flockhart & Co., it was usual to use ether. On the advent of chloroform, I remember, we had a big stock of brass ether-inhalers, and we had to carry them as dead stock for many a year, owing to the change wrought by the use of chloroform. Our sundry-department at that time occupied a small room over the doorway, about one-twentieth the size of our present showroom.

When the Liverpool Chemists' Association was formed, I was deeply immersed in the affairs of our young but growing house. I therefore had but little time to devote to its practical working, but what time I could spare I gave, and was its first Vice-President and Treasurer. In the course of a few years I served you in the capacity of your President. Among those most closely associated with its fortunes were

Mr. Robert Clay (President), Mr. Abraham, Mr. R. Sumner Mr. Mercer, Mr. McGuffie, Mr. Lathbury, Mr. Fisher, of Bold Street, at the corner of Slater Street—this man used to call every morning at the office and leave an order. Dr. Edwards, of Berry Street, was a very active man, and I believe he is still living in Montreal. Dr. Nevius contributed some valuable papers. Mr. Allpass was also a leading light, and became a member of the Town Council. Messrs. Geo. Thompson, J. H. Johnson, Rawle, Rowland, Wagstaffe, Tierman, Shaw, and Jardine, with Professors Brett and G. Hamilton helped the Association very ably. The first meeting was convened at the Queen's Hotel, on June 4, 1849, by Mr. Jacob Bell. All these and others did much to secure the foundation of the Society, and, as its records prove, much valuable service was rendered to our calling. I am glad to note that the Association is still constantly contributing, in some form or other, to the sum of pharmaceutical knowledge, and that it has, by its past history, so fully justified its existence.

One feature which disturbed the even tenor of the chemist's way in Liverpool for a time was the establishment of the Liverpool Apothecaries' Company, of which Mr. R. Clay was the first manager. This institution sought to get a special Act of Parliament for incorporation, but the Liverpool chemists, supported by the London houses, offered such opposition that the Act was refused, as also was application for an order from the Board of Trade to confer special power on the Apothecaries' Company. Some of our customers became shareholders, but the original scheme was ultimately much modified, and Mr. Clay took up more congenial labours elsewhere.

I was one of the original members of the Pharmaceutical Society after its incorporation, and have been a member ever since. I remember the starting of the *Pharmaceutical Journal*, which was first edited by Jacob Bell, and I recall the umbrage which the appearance of his name as editor on the title-page caused to one of his rivals, who strove for a long time to have it removed, alleging that it was not the correct thing for him to put it there, as the journal was the property of the Pharmaceutical Society. In 1859 the *C. & D.* was started, not so much as an opposition paper, but to voice the feelings of the trade with regard to "early closing"—a subject which is still with us, as lusty as ever—and to protect more fully the trade interests, a line of policy which it seems to have adhered to throughout, with manifest advantage to itself and the trade.

One of the striking features of one's memories of the early days he spent among pharmacists in the early part of this century would always be the figure of the Quaker druggist, Jacob Bell, who was an enthusiast, and longed so to benefit his brethren of the craft, that he went into Parliament to further the interests of the chemist, asserting stoutly that the ordinary private members of the House were too indifferent to be affected by the claims of the dealer in drugs and compounder of medicine. Many were the amusing stories told of this bachelor druggist, who, though a Quaker had queer views on some points, and some of his practical jokes might hardly have been relished by the "unco guid" of to-day. Bell was a great friend of Landseer, the painter, and secured many of his pictures, which were afterwards bequeathed to the nation. It is said that after Landseer had painted "The Horse-shoeing" (I think that was the picture) he was dissatisfied with the general effect, and mentioned the fact to Bell. The latter, on looking at the work, suggested that a donkey should be painted in, standing under the head of one of the horses. This was done, and the result proved satisfactory to the artist, the donkey being allowed to remain.

Mr. Lescher, father of our present London partner, was at that time on the Council of the Pharmaceutical Society, and I recollect that associated with him were many men, famous in pharmacy—for instance, Thos. Herring (Herring Brothers were then recognised as the head of the profession in London), Ince, Morson, and others. The honour of being a member of the Pharmaceutical Council was conferred on me, and for some time I served the Society in that way, giving place in time to my younger brother, H. Sugden Evans, who, as you will remember, died several years ago while on a visit to New York—occupying at that time the position of Chief Analyst to the Dominion of Canada—and who, during his residence in Liverpool, contributed many papers to the Liverpool Chemists' Association.



Much has been said, and is being said, as to the work that the Society has done and what it has not done for the chemist, but looking over the years covered by my association with the trade, I am bound to say that the Society has done much for the chemist. It has vastly improved his status in many ways, and contributed to his well-being. It could have done more if the chemists had rallied round it in a more whole-hearted manner. The new conditions of membership I hope will lead to new activity and more solid union among chemists as a body, thus realising at once the forecasts and the hopes of its founders.

Now, when my hair has been whitened by the kindly frosts of many winters, I lay down my pen with a strong and abiding sense of hope. True, the conditions of life are to-day more intense, and the struggle of life keener—still, men make fortunes, win competencies, and I have lived to see much wrong righted, many abuses checked, great and lasting benefits conferred on the masses, and room—ample room—left for the man of energy and talent to rise in his profession and find the fullest play for the faculties that God has given him.

The address was listened to with close attention, and the good points in it were received with appreciative laughter and applause. At its conclusion, Mr. BAIN (ex-President) proposed a vote of thanks to the author. He said they had had a great treat, and he noted with much pleasure that, though the writer had retired from active work so long, he was so *au fait* with modern pharmacy. The best feature of the address, he thought, was the spirit of hopefulness which pervaded it. Such words, coming from a veteran, should inspire the younger men to fight the battle of life more manfully.

Mr. T. F. ABRAHAM said it had been delightful to listen to such a graphic account of the past and of the conditions of their calling so many years ago. Times were hard enough now for most people, but it was consoling to know that there were days when they were worse. They were much indebted to Mr. Evans for his inspiring paper.

Mr. ED. DAVIES, Mr. J. HOCKEN, and Mr. R. C. COWLEY also expressed their hearty appreciation of the lecture.

Mr. JOHN J. EVANS, in briefly acknowledging the vote, said that his father was essentially optimistic in his views. He was glad the address had met with so much approval.

#### GINSENG-ROOT.

Mr. T. H. WARDLEWORTH then read a short note on Ginseng root (*Panax quinquefolium*). He said he brought



this drug under the notice of the Association in consequence of several inquiries which had been received from druggists

in this country. A great deal of doubt seemed to exist as to what was intended, and he therefore thought a few particulars supplementing, if possible, the somewhat meagre accounts in the text-books might be useful.

A variety of Ginseng had been known for a long time in the East. This was the *Panax Ginseng*, collected chiefly in Tartary, Manchuria, Corea, China, and Japan, but the variety which interested the British pharmacist most was the American (*P. quinquefolium*). This variety grows chiefly in the northern states of America and in Canada. For a long time it was looked upon as a weed, but the immigration of the Chinese into the States had made it an important article of commerce. In China it is said to have sometimes realised fabulous prices; in some cases it has been sold for its weight in gold. The Chinese look upon it as the most wonderful aphrodisiac in existence, as having the power of prolonging life to a miraculous extent—in fact, as a universal panacea. Dorvault only mentions the Eastern variety (*P. Ginseng*), and adds that the root is made into pastilles and used in a much-praised wine. He also says it is employed as a febrifuge. Hanbury and Fluckiger dismiss the drug in two or three lines, and say it is used as an adulterant of senega and serpentry root. The author of the note thinks this could only happen with the immature drug, as the sample he showed had roots far too large to be confounded with either of the articles mentioned. The specimens shown were fusiform roots, measuring from 12 to 15 cm. in length and 2 to 4 cm. in the widest part. The roots break with a starchy fracture, and possess a peculiar aromatic odour and taste. They are of a pale straw colour and are characterised by a number of narrow annular markings. He was informed that the demand for this article outside China is very small indeed, as it has been found to possess little or no medicinal value beyond being a carminative and demulcent.

A vote of thanks was accorded to the reader, on the motion of the CHAIRMAN and Mr. PROSPER H. MARSDEN, the latter remarking that he believed Mr. E. M. Holmes had found *P. quinquefolium* as an adulterant of serpentry-root. He also took this opportunity of congratulating Mr. Wardleworth on his election as a Fellow of the Linnean Society.

#### Chemists' Assistants' Association.

THE following is the programme for the ensuing half-session:—

- Jan. 26.—Musical and Social Evening, 73 Newman Street, W.
- Feb. 2.—Paper: "The Spectacle-makers' Company and Its Optical Examination." Mr. S. W. Woolley.
- " 9.—Paper: "The Alleged Decline of Pharmacy and Pharmaceutical Research." Mr. F. Upsher Smith.
- " 16.—Paper: "Antitoxins: Their Preparations, Properties, and Administration." Mr. R. J. Hewlett, M.D., D.P.H.
- " 23.—Paper: "Dairy-produce." Messrs. A. H. Mitchell Muter, A.I.C., and P. R. Hill.
- Mar. 2.—Annual Dinner, Holborn Restaurant.
- " 9.—Paper: "The Commercial Study of Drugs." Mr. J. H. Heap.
- " 16.—Paper: "The Chemistry of Gout." Mr. A. P. Luff, M.D., B.Sc., F.R.C.P. A demonstration will be given of the methods of determining uric acid.
- " 23.—Cinderella Dance, Portman Rooms.
- April 13.—Paper: "Methods of Alkaloidal Assay in their Pharmaceutical Application." Mr. H. A. D. Jowett, D.Sc.
- " 20.—Paper: "The Hygiene of the London Streets." Mr. T. A. Ellwood, D.P.H.
- " 27.—Musical and Social Evening.
- May 4.—Annual General Meeting.

#### Newcastle-on-Tyne and District Chemists Association.

A MEETING was held on January 11 at the Hotel Metropole, Newcastle-on-Tyne. In the absence of the President, Mr. W. Kerse presided. It was stated that Mr. G. F. Merson, F.C.S., had resigned his position as Hon. Secretary. After some discussion, Mr. F. Gilderdale, F.C.S., 19 Groat Market, Newcastle-on-Tyne, was appointed to act until the end of



the Session. Mr. Merson was heartily thanked for the excellent service he had rendered to the Society.

Mr. GILDERDALE, F.C.S., then read a paper on

THE RELATIVE VALUES OF FIRST AND SECOND BIENNIAL  
HENBANE LEAVES.

His attention had been drawn to this subject by the fact that the last season's crop of second biennial henbane was not up to the average, as regards the yield, which had caused extreme prices to be asked for these plants and their respective preparations, whereas the first year's plants, which are not official, could be had at considerably less cost. This led him to chemically examine these plants to see what alkaloidal and other differences existed. Having referred to their botanical differences, and to the opinions of the older botanists, Mr. Gilderdale showed how the second year's biennial plant became gradually recognised as possessing greater virtues than the leaves of the first year's plant. Up to 1890 (he said) no attempt had been made to determine with accuracy their relative merits. Mr. A. W. GERRARD then contributed a paper to the British Pharmaceutical Conference at Leeds, which he supplemented by another paper the next year.\* Mr. Gilderdale's results showed that although the first year's leaves do not contain as much extractive matter as the leaves and tops of the second year's plant, they do contain as much alkaloid, and in many instances slightly more. Samples of tinctures, extracts, &c., made from both these plants, were on the table, as well as samples of the plants, photographs, diagrams, &c.

A good discussion followed in which Messrs. MERSON, PITTUCK, BUCKLEY, KERSE, DUDDERIDGE, and PESCOD took part. A vote of thanks was accorded to the author.

### Penny Science.

A SERIES of penny science-lectures is being given this month at the Royal Victoria Hall, Waterloo Bridge Road. The science is sandwiched between a programme of popular music by a competent orchestra, and an entertainment consisting of songs, instrumental solos, and a ventriloquist



PROFESSOR J. B. FARMER.

entertainment; but everything, including the science, is of a first-rate quality. On the evening of January 17, Professor J. B. FARMER, the newly appointed examiner to the Pharmaceutical Society, gave an illustrated lecture on "Plants as Engineers," in the course of which he compared the structure of plants with the mechanical constructions of men. Everyone, he thought, must have been struck with the wonderful way in which plants withstood the painful stress and strain to which they were subjected by great storms. He then proceeded to show that some parts of every plant had a definite mechanical function to perform; sclerenchyma being the principal mechanical tissue of every plant. He described sclerenchyma and collenchyma very fully and clearly, and by blackboard and lantern gave illustrations of the relative elasticity and

breaking-strain of various plants as compared with silver wire, wrought iron, and steel. He then showed that the counterparts of the flanges and webbing of an ordinary girder were to be found in the cross-section of the white dead-nettle (*Labium album*) which he describes as consisting of a combination of girders. A point considerably appreciated by the audience was when the lecturer spoke of the "uncompromising character of the gorse prickle with which many of them would be familiar." This stern unbending condition he showed to be due to the large quantity of sclerenchyma tissue of which the prickle was comprised. A signal-post and the Eiffel Tower were shown and described in succession, and it was seen that in various plants the same type of construction obtained. Professor Farmer then alluded to the amazing mechanical strength of slim-looking plants, and said that this had been particularly impressed upon him while in Ceylon a few years ago as he watched the swaying of giant bamboos in a high wind. These plants, which grew to a height of between 60 and 70 feet, were hollow in the centre (an actual section was shown), and yet the breaking-power which they possessed was enormous. There was a great advantage in favour of the plant if we but considered the relative stability of a grass and even a well-built chimney-stack. Buttressed plants were alluded to, the indiarubber-fig being shown as an example, and climbing-stems were illustrated by a species of asparagus (jungle rope), which is no thicker than a man's little finger, but which, nevertheless, is used to bind elephants with. All these plants have strong sclerenchyma tissue near the centre of the stem. From stems he passed on to leaves, showing the same girder-like structure, the edges being protected by jagged ends, which made it almost impossible to tear the leaf. The banana had a small fragile stem, but a large leaf-blade, which split up by a special arrangement into little leaflets, and these leaflets served the purpose of breaking the force of high winds on the stem of the plant. Plants, he affirmed, did not confine themselves to what they had to do, but could intelligently adapt themselves to circumstances. Suppose a weight was hung on a certain plant which bent but did not break it, the plant would produce sclerenchyma so successfully that by the following week another weight half as heavy again as the former might be hung upon it without breaking the stem. Plants, said the Professor in conclusion, deal with the mechanical problems which confront them in a very comprehensive and capable manner, and are indeed very intelligent organisms.

### Bradford and District Chemists' Association.

ON January 17 Mr. F. BRANDRETH gave a lantern-lecture on "Wensleydale." Over a hundred excellent photographs were thrown upon the screen, and an interesting description given of each.

### Edinburgh Chemists', Assistants', and Apprentices' Association.

AT a meeting held on January 11, Mr. G. H. C. Rowland (President) in the chair, the papers contributed related to dispensing-difficulties. The first was

#### AN INCOMPATIBLE MIXTURE.

By William Duncan.

The following was the mixture:—

Sodii bromidi...	...	...	...	3iv.
Phenazoni ...	...	...	...	3iss.
Chloral. hydrat.	...	...	...	3iiss.
Syr. limonis ...	...	...	...	3j.
Aq. ad ...	...	...	...	3iv.

On mixing the chloral and antipyrin solutions an insoluble compound is immediately produced, either as an oily liquid as in this case, or by varying the proportions a crystalline salt may be obtained. This was pointed out about eight years ago, and, indeed, the compound has been introduced into medicine under the name of "hypnal."

#### NOTE ON BROMOFORM AND CREOSOTE.

By George Somerville.

A medical practitioner had a difficulty in dispensing bromoform. There were three methods in use:—(

\* An important paper on this subject, by Mr. William Gilmour, was published in THE CHEMIST AND DRUGGIST, June, 1884.



emulsification, which was unsatisfactory; (2) giving it in capsules or pearls, but for children this answered badly; (3) giving it in drops; this was liable to error of overdose. After trying several methods the idea occurred of dissolving the bromoform in glycerin. A satisfactory formula which has stood the test of time was found to be the following:—

Bromoform. ...	...	...	...	mxxxij.
Alcohol, 90 %	...	...	...	3ij.
Glycerin. ad ...	...	...	...	3j.

This has the advantage of mixing well with water, and many other drugs or flavouring agents can be added without throwing the bromoform out of solution. An analogous formula answers equally well in the case of creosote.

#### INCOMPATIBLE STRYCHNINE-MIXTURES.

By J. Gordon Nicholson.

The following had to be dispensed:—

Hydrarg. perchlor. ...	...	...	gr. ij.
Potass. iodid. ...	...	...	3iv.
Liq. strychninæ hyd. ...	...	...	3ij.
Glycerini ...	...	...	3iss.
Infus. quassiae ad ...	...	...	3viij.

This is an instance of the well-known double iodide of mercury and potassium acting as an alkaloidal precipitant. The difficulty was overcome by dispensing the medicine in two separate bottles. No other method is safe. It had been twice previously dispensed elsewhere, first as a cloudy mixture and then as a clear one. How the latter result was attained was not disclosed. Incidentally, while experimenting with the mixture, an advantage possessed by the 1898 liquor strychninæ hydrochlor. over that of 1885 was observed. One drachm liquor strychninæ hydrochlor., 1885, with 1 gr. hydrarg. perchlor. in 2 oz. of water shows separation of crystals in a few minutes. The same mixture with 1898 liquor strychninæ remains clear at the end of four days. The second instance is—

Liquor. strychninæ hydrochlor. ...	3iij.
Elixir. saccharin. ad ...	3ij.

Sig.: Twenty drops thrice a day.

There is an immediate precipitation in this mixture due to decomposition of the soda saccharin compound by the strychnine hydrochloride, with separation of strychnine and saccharin, sodium chloride remaining in solution. A separate experiment, omitting the saccharin, showed that the strychnine carbonate separates in small crystals, which adhere closely to the sides of the bottle. This precipitate, in a concentrated solution to be administered in 7-drop doses, is decidedly dangerous, but, when consulted, the prescriber refused to make any change. An improvement might be to use 90-per-cent. alcohol as a vehicle.

#### A PEPSINE - MIXTURE.

By J. Gordon Nicholson.

In THE CHEMIST AND DRUGGIST for December 10, 1898, there is a report on a pepsin-mixture by Mr. Wokes, read at the Liverpool Association, in which he alleges that the pepsin forms tenacious clots, which require to be separated and rubbed down with the mixture. I have tried the mixture with various pepsines, including the brand which Mr. Wokes says he used, and mixing the ingredients in all kinds of ways, without in any instance finding any tendency to clotting. Specimens of the results were shown. In all the pepsine was in a uniform easily diffusible powder.

Mr. RUTHERFORD HILL then exhibited a number of fresh botanical specimens, illustrating the unusual mildness of the season.

"I HAVE found your 'Pharmaceutical Formulas' of very great benefit indeed, saving time and trouble. 'Diseases and Remedies' will also be very helpful."—M. W. WALKER (Dundee).

THE WINTER ISSUE OF THE CHEMIST AND DRUGGIST falls on January 28. That is the number in which we can insert circulars and price lists, at charges far below what it costs to send them singly by post. Our publisher will reply to any inquiries.

## Pharmaceutical Society of Great Britain.

### NORTH BRITISH BRANCH.

THE third meeting of the session was held at 36 York Place, Edinburgh, on Wednesday, Mr. J. Laidlaw Ewing in the chair.

Mr. D. B. DOTT, F.I.C., F.R.S.E., communicated a note on

#### TESTS FOR SODIUM SULPHATE.

He said the only important test was that for the estimation of the sulphurous radicle by standard iodine solution. It had long been known, and the matter was thoroughly investigated by Bunsen, who showed that in concentrated solutions hydriodic acid was decomposed by sulphurous acid, so that in estimating  $\text{SO}_2$  by iodine it was necessary to work with a highly dilute solution. The Pharmacopœia recognised that fact, and directed that "each gramme dissolved in 50 c.c. of water should decolorise not less than 77.7 nor more than 81.7 c.c. of the volumetric solution of iodine." Unfortunately the test was so expressed as to admit of serious error. In the first place the result varied greatly according to the rapidity of the titration. He instanced three estimations:—

a. Iodine added very slowly ...	...	...	78.74
b. Iodine added slowly ...	...	...	85.65
c. Iodine added quickly ...	...	...	98.46

Secondly, there was considerable oxidation in the process of solution, and more if the solution was allowed to stand. Powdered sulphite gave a better result than the crystals because the crystals dissolved less quickly. By dissolving in recently boiled but partially cooled water, and adding the iodine as rapidly as possible, 92.45 per cent. was indicated. The same solution after a few hours showed only 86.68 per cent. By dropping the weighed powder into a known slight excess of iodine solution, dissolving quickly and titrating with thiosulphate, 95.24 per cent. of sulphite was found. This method gave not only the highest but also the most constant results, and he suggested it as an amendment of the B.P. test. The subject had been investigated by Giles and Scheerer and is referred to in Sutton's "Volumetric Analysis."

#### STRYCHNINE HYDROCHLORIDE.

In another note Mr. DOTT said there had been some controversy as to the amount of combined water which strychnine hydrochloride contained. The B.P. stated that at  $100^\circ \text{C}$ . the salt lost 7.3 to 8.8 per cent., the higher number agreeing with  $\text{B.HCl} \cdot 2\text{H}_2\text{O}$ . Even in the case of such a powerful alkaloid as strychnine the permitted amount of variation was not serious. The Pharmacopœia ought not to have given the temperature as  $100^\circ \text{C}$ . Strychnine muriate could not be completely dried in a water bath, and even at  $100^\circ$  it lost weight very slowly. The salt should be dried at  $130^\circ$  to  $140^\circ \text{C}$ . Three quantities which were carefully dried and sampled as soon as apparently dry indicated—drying at  $135^\circ \text{C}$ —7.67 per cent., 7.62 per cent., and 7.71 per cent. of loss. It would therefore appear that the hydrochloride did not crystallise with two molecules, or that it effloresced with extreme readiness to a composition something like  $\text{B}_2 \cdot 3\text{H}_2\text{O}$  which required 7.84 per cent. of water.

#### ACID. GALLIC.

Mr. DOTT noted that Dr. Sellar had recently expressed doubt at one of their meetings as to the accuracy of the pharmacopœial statement that solution of gallic acid gave no precipitate with solution of tartar emetic. A sample of average quality was tested, and found to give an abundant precipitate. The acid was then twice crystallised from water, and again tested, with the same result. It was evident, therefore, that what was ordinarily understood as gallic acid gave a precipitate with solution of tartarated antimony contrary to the official statement.

#### ESTIMATION OF EUCALYPTUS OIL.

Mr. DOTT said the Pharmacopœia had quite properly decided that eucalyptus oil must contain a considerable



percentage of eucalyptol, as indicated by the phosphoric-acid test. The Pharmacopœia did not fix a definite percentage, but it was often required to know the amount present in the oil and in commercial eucalyptol. The determination was generally made by converting the eucalyptol into phosphate by treatment with syrupy phosphoric acid. In reference to that method Mr. Dott described seven different samples of eucalyptus oil and eucalyptol, which he so treated. The eucalyptol might be estimated (1) by weighing the thoroughly pressed cake of phosphate, (2) by decomposing the phosphate with water and weighing the eucalyptol, (3) by titrating the acid solution and calculating the equivalent in eucalyptol on the basis that one molecule of phosphoric acid equals one of eucalyptol. To ensure that the eucalyptol phosphate was free from terpenes and uncombined acid, the mass must be pressed repeatedly in folds of blotting-paper. That process occupied some time, and, as the phosphate was hygroscopic, there was some risk of water being absorbed, and so causing error. On theoretical grounds, the plan of separating the eucalyptol and weighing it seemed advantageous, but in practice this method was found open to error. When the phosphate was merely decomposed by contact with cold water the supernatant eucalyptol was apt to contain a considerable amount of phosphate in solution, and so indicate an excessive result. On the other hand, when decomposed by hot water or with sodium-carbonate solution there was considerable loss by eucalyptol being dissolved. It should be noted that eucalyptol was decidedly more soluble in diluted phosphoric acid than it was in water. It might be surmised that the third method (by acidimetry) would be liable to error by the pressed cake retaining excess of acid, but, practically, that did not occur to any serious extent, and the method seemed quite reliable if care was taken that all the acid was washed out. Yet it seemed an unnecessary elaboration on the simpler plan of weighing the pressed phosphate and calculating the proportion of eucalyptol. Besides the well-known and more obvious precautions in making the determination, too large an excess of acid must not be used. If it was found in making the estimation that much excess of acid had been used it was well to repeat the experiment with a proportion of acid nearer that required by theory, but still in some excess. Having regard to the decomposing effect of water it would seem probable that better results should be obtained by using phosphoric acid quite free from water.

Mr. BOA, in discussing the papers, said they would be of service to them in commercially dealing with the substances to which they referred. In regard to eucalyptus oil having a value in so far as eucalyptol was concerned, he was disposed to agree with Mr. Dott that it was improbable that the virtues of eucalyptus oil were due entirely to eucalyptol. At the same time the oil could be divided on the basis of eucalyptol, and in the present stage of their knowledge they had no easy means of valuing it. In dealing with eucalyptus oil in the course of business he had noticed some curious conditions. Certain eucalyptus oils were somewhat different in character, and he found that it was possible to determine pretty accurately by the smell the eucalyptol contents of the oil. For commercial purposes he would take the smell of eucalyptus into consideration along with its eucalyptol content.

Mr. LUNAN said he had tried to drive off water from strychnine at 100° C. He had found 8.4 per cent. in a commercial sample, and that indicated two molecules of water.

Dr. DOBBIN, referring to Mr. Dott's remarks on sodium sulphite, said this was an instance in which the compilers of the Pharmacopœia should have given more detailed instructions. One point in these volumetric tests which had not been noticed was that under potassium permanganate the Pharmacopœia prescribed the use of an oxalic-acid solution which, he took it, was intended to be a normal solution. The strength given was 62.58 grammes per litre, but that was the figure for normal nitric-acid solution, the correct figure for normal oxalic solution being 72.55. That was a difference of only 1 in 2,000, but in a book where atomic weights were stated to the second place of decimals greater accuracy was expected.

Mr. W. DUNCAN said the test for sodium sulphite suggested, would be at fault if the sample contained

sulphite. He observed a tendency to sublimation in strychnine hydrochloride when the temperature rose to about 130° C.

Mr. J. R. HILL said that when working on strychnine hydrochloride with Mr. Duncan a few years ago there appeared a tendency to sublime when the temperature rose above 120° C., and he had repeated the experiment with the result that a sublimate formed which gave all the strychnine-reactions. Blyth had shown that the alkaloid sublimed at 169° C., and it could be distilled unchanged under diminished pressure at 270° C. It was possible that some loss of alkaloidal hydrochloride might take place by sublimation at 135° C., and that might indicate more molecules of water of crystallisation than the six previously indicated by Mr. Dott.

Mr. DOTT, in reply, said he had not attempted to determine whether the loss of strychnine alkaloid was due to other causes. The salt decomposed and became insoluble in water at 150° C. But there was no apparent change at 135° C. The residue dissolved in water.

#### NOTE ON A SAMPLE OF PHENAZONE.

Mr. HILL communicated a paper by Mr. A. J. Dey with regard to several samples of phenazone which he had occasion to examine after the lapse of the patent-law monopoly on that commodity. When a sample was placed in water minute magenta-coloured spots were noticed on it. A few days ago he again examined the sample which had been laid aside to ascertain the cause of the spots. They could not be detected with the naked eye, but by means of a lens minute dust-particles were seen, some of which did not appear to be acted on by water, while others immediately dissolved and produced a deep magenta colour which slowly changed to a brownish colour. They presented all the qualities of fuchsine or rosaniline hydrochloride. Particles of fuchsine added to a sample of pure phenazone behaved in exactly the same way. Probably the fuchsine was being handled in the same works while the phenazone was being dried and some floating particles had settled down on it. Pharmacists should be on their guard, especially when the patent for any of these synthetic remedies expired, because new makers appeared, and there was greater risk of some not being up to the standard of that produced by the patentee.

Mr. J. RUTHERFORD HILL then read a paper on

#### THE B.P. SOLUTION OF ACETATE AND CITRATE OF AMMONIA.

The 1885 Pharmacopœia, he said, directed that solution of ammonium acetate should be made by dilution of a concentrated solution five times the strength. The disadvantage of that method was that the solution contained less carbonic anhydride and possessed a more saline and less agreeable taste. In the new Pharmacopœia a return was made to the older method of the 1867 Pharmacopœia, except that a definite quantity of ammonium carbonate was to be neutralised instead of a definite quantity of acetic acid. The process was designed to retain in the finished product as large a proportion as possible of the carbonic anhydride, which gave it a pleasanter taste, and added to its therapeutic value. The process was a tedious one, on account of the difficulty of accurately determining the point of neutrality. It had occurred to him that a short and more satisfactory method might be devised, and he had made a few experiments with that view. His method was to determine the alkalinity of the ammonium carbonate with standard sulphuric acid and the acidity of the acetic acid with caustic soda, and, knowing these, to work out the exact quantities required for neutralisation of the samples. Experimental batches of liq. ammon. acet. were made by this method with uniformly satisfactory results. It was necessary that the determinations of the ammonium carbonate be done quickly, and that the sample be taken from the bulk previously reduced to a coarse powder. The same method was also applicable to the solution of ammonium citrate, and his experiments proved the superiority of the results in taste, the process not being a longer one than the official one, owing to the replacement of a tedious process by easily-determined neutrality methods.

Mr. J. R. HILL also communicated a note on

#### TINCTURE OF HOPS,

to which, he said, his attention had been directed when



investigating the cause of an unsightly precipitate in a mixture containing a dilute mineral acid and tincture of hops. The tincture of hops of the new Pharmacopœia was made with 4 oz. instead of  $2\frac{1}{2}$  oz. of hops to 1 pint of 60-per cent. alcohol. It was, therefore, about 60 per cent. stronger in hops, and the menstruum was slightly stronger in alcohol than the former proof spirit of 1885. He naturally expected to find that the new tincture contained more resin and gave a larger precipitate with dilute mineral acid than the old one, but on trying the samples he found the contrary was the case. On examining the two samples it was noticeable that the 1885 tincture was of a deeper colour than the new, but this was, no doubt, partly due to age. But the odour and taste of the old sample were also distinctly stronger. The old tincture had a sp. gr. of 0.930, and yielded 3.1 per cent. of extractive, while the new tincture had a sp. gr. of 0.929, and yielded only 2.6 per cent. of extractive. He had reason to believe that the old tincture was carefully made from good hops, and it looked as if the hops used, as well as the menstruum in the new tincture, were not up to the same standard, and the quantity of menstruum—20 oz. to 4 oz. of hops—was relatively small in the case of such a bulky material. The Pharmacopœia did not say the product after maceration was to be made up to 1 pint. He feared that was sometimes done, and it would ensure accuracy if the Pharmacopœia stated explicitly that that was not to be done. The difference in these two tinctures was so striking that a few others were examined, and he gave the results in tabular form. These samples varied among themselves sufficiently to be noticeable by patients, and as tincture of hops was coming into pretty general use in Edinburgh, it was important there should be a definite product supplied. This was difficult of attainment with a drug so liable to variation as hops, and so apt to give rise to discrepancies from faults of manipulation. It had been suggested that a more definite tincture could be made from lupulin, which was regarded as containing the active constituents of the hops. But such a tincture wanted the peculiar tannin of hops, the function of which as a therapeutic agent might be of some importance. It was proposed to continue this inquiry with a view to arriving at a suggestion which might secure greater precision.

## Personalities.

MR. JNO. F. WALKER, of the firm of Walker, Troke & Co., has secured the conjoint qualification, L.R.O.P. and M.R.C.S. Eng.

MR. SIDNEY HARVEY, pharmaceutical chemist, and city analyst, 8 High Street, Canterbury, has been elected a member of the Canterbury Chamber of Trade.

DR. KIPPENBERGER, Professor of Chemistry at the Cairo School of Medicine, is retiring and is to be succeeded by Dr. W. A. Schmidt, assistant to Professor Ostwald.

MR. F. GERALD RACINE, dispensing chemist, 122 St Mary's Street, Southampton, figured in the *Star* on Monday evening as the winner of a 100% prize for a footballing guess.

MR. S. SCRUTON, of Raimes & Co., wholesale druggists, presided at the annual dinner at York Chamber of Commerce, on January 10. Mr. Butcher, M.P., was the principal speaker.

It was Mr. William Pickard, of 3 West Kensington Terrace, W., the only pharmaceutical chemist, of that name on the register, who attended the Pharmaceutical Society's special meeting. Our list gave him as of Sheffield.

At the recent meeting of the Alfred Lodge, No. 340, the Worshipful Master, G. Claridge Druce, Prov. Grand Junior Warden, was invested with the silver chain by Lord Jersey, R.W.P.G.M., which in commemoration of his year of office Brother Druce had presented to the Lodge. It consists of silver stars, initials of the Lodge in red enamel, silver cable-tows, square and compasses in blue enamel, and the enamelled arms of Oxford. The badge is an artistic copy of the celebrated Alfred Jewel, which is preserved in the Ashmolean Museum, and represents the patron saint of King Alfred in cloisonné enamel. The banquet which followed was very largely attended and included the Earl of Jersey,

P.G.M., Viscount Valentia, M.P., D.P.G.M., the Masters of the Apollo, University, Churchill, Bertie Windrush and other lodges.

## Business Changes.

*Notices of changes in the retail trade, and opening of new businesses, are inserted in this section free of charge, if properly authenticated.*

MR. B. HARBOTTLE, chemist, has opened the Park Pharmacy Stores at 141 Elswick Road, Newcastle-on-Tyne.

MESSRS. WILSON, SMITHETT & Co., produce-brokers, have removed their salerooms and counting-house to 21 Mincing Lane, E.C. They have recently taken into partnership Mr. Geo. Stehn and Mr. Walter Smithett, the latter a son of the senior partner.

MR. WILLIAM MASKEW, pharmaceutical chemist, has sold his business at 225 Oxford Street, Manchester, and intends to reside in the South of France and travel for English houses. His present address is 317 West Green Road, Tottenham, London, N.

## Marriage.

PORTER—CARRINGTON.—On January 11, at Ulverston, by the Rev J. U. N. Bardsley, rector, Walton Porter, pharmaceutical chemist, Ulverston, to Jane Elizabeth Carrington.

## Death.

WYNNE.—On January 15, Mary Anne, beloved wife of Edward Price Wynne, chemist, Aberystwyth. Aged 59.

## Wills of Deceased Chemists.

ALLEN.—The will of Mr. Willie Allen, of Allen & Lloyd, chemists and druggists, Basingstoke, who died on October 23, 1897, has been proved in London by Mrs. Allen, the widow, and Mr. F. J. Paice, C.E., 197E Hagley Road, Birmingham—Mr. Herbert L. Allen, the brother and other executor of the testator, having renounced probate. The testator's personality, first sworn at 1,967*l.* 14*s.* 5*d.*, has been re-sworn at 2,127*l.* 16*s.* 1*d.*

BELL.—The will of Mr. Richmond Bell, chemist and druggist, Otley, Yorkshire, who died on July 14, has been proved by Mr. William Milligan and Mr. Robert Harris, both of Otley. The testator's estate is sworn at 1,198*l.* 3*s.* 11*d.*, of which 1,177*l.* 19*s.* 6*d.* is net personality.

FOSTER.—The will of the late Mr. R. D. Foster, chemist and druggist, Burford, Oxon, has been proved by his sons, Mr. W. R. Foster, Ilfracombe, and Mr. R. G. Foster, Burford. The testator's personality was sworn at 173*l.* 14*s.* 7*d.*

KING.—The will of Mr. F. H. King, chemist and druggist, Cheshire Street, Market Drayton, Salop, who died on March 29, 1898, has been proved by Mr. James Wright, by whom the testator's estate was sworn at 762*l.* 0*s.* 2*d.*, of which 744*l.* 0*s.* 6*d.* is net personality.

MACKEY.—Letters of administration to the estate of Mr. J. B. Mackey, wholesale druggist, 26 Sussex Gardens, and Bouverie Street, E.C., who died intestate on March 26, 1898, have been granted to Mr. J. A. D. Mackey, 175 Grange Road, Bermondsey, son and only next-of-kin to the testator, whose estate was sworn at 21,343*l.* 11*s.* 2*d.*, of which 16,241*l.* 15*s.* 5*d.* is net personality.

SNAITH.—The will of Mr. P. T. Snaith, chemist and druggist, Boston, who died on July 31, 1898, has been proved by Mr. E. H. Hall and Mr. Thomas Ridlington, both of Boston. The testator's estate was sworn at 923*l.* 12*s.* 3*d.*, of which 184*l.* 16*s.* 5*d.* is net personality.



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## Editorial Comments.

### Dispensing in Doctors' Surgeries.

WE return with regret to the report of the fatal dispensing error which appeared in our columns last week, and of which we give fuller details on page 81. The terrible experience of having occasioned the death of a fellow creature by a mistake in compounding medicine must be in itself such a severe punishment to any sensitive person that it seems harsh to use the event more than is absolutely necessary even for the purpose of gathering some lessons for the future from it. But the occasion is one which so strikingly enforces the arguments which chemists often use, and which the Legislature has to a certain extent admitted, that it is impossible to pass it by. Coincidentally with the detailed report of the evidence of the prescriber and dispenser in the case on page 106, we give the copy of a letter which Mr. Glyn-Jones has sent to the Privy Council. What direct effect that letter may have we cannot tell, but we are sure it is a matter of both public and trade importance that chemists should endorse Mr. Glyn-Jones's action; and if some hundreds of them would write independent letters to the Privy Council urging official consideration of the serious danger pointed out, some good might result.

In THE CHEMIST AND DRUGGIST of August 28, 1897, we published an article on "Dispensing in Doctors' Surgeries by Unqualified Men," by an ex-unqualified dispenser. The assertion was there made that three-fourths of the medicines prescribed in this country are dispensed by unqualified men, and that unqualified men constantly "sell" scheduled poisons, in the form of medicines prescribed by the doctor, in such a way that they undoubtedly infringe both the spirit and the letter of the Pharmacy Act. Some corroborative evidence was given in subsequent correspondence, but the matter went no further, as the Pharmaceutical Council, which is the only body which can take action under the law as it stands at present, had its hands full with measures for replenishing its own exchequer, and had no inclination to take up new work. Last November a request from the Chemists' Assistants' Union (instigated by Mr. Glyn-Jones), urging that the practice of the dispensing



of poisons by unqualified persons in doctors' surgeries should be looked into with a view to action, was brought specifically before the Council. The Council, led by Mr. Carteighe, either did not understand the suggestion, or pretended not to understand it. Mr. Carteighe said, in effect, that the people who sent the resolution did not know what they were talking about: they had suggested what was impracticable. They did nothing of the kind. They only suggested that the Council should do in England what had been done in Scotland. It is as much an offence for an unregistered person to sell a poison in a surgery as in a chemist's shop. And thousands of bottles of medicine containing scheduled poisons are sold—yes, legally sold—in doctors' surgeries by persons who are neither doctors nor chemists every week. The Pharmacy Act is perfectly strong enough to deal with a very large number of such cases.

But it is a grave question whether the law should not go further and for the public benefit insist that the dispensers of medicines in doctors' surgeries should be qualified, whether they sell poisons or not. We are not suggesting that doctors themselves should not be allowed to dispense, though when we think of the ease with which a doctor can in most cases cover up the mistakes which happen in his surgery, it does not seem an unreasonable demand that the functions of the prescriber and the dispenser should be rigidly separated, as is the case on the Continent. But, in view of the revelations of carelessness and incompetence which the Stockport case affords, it is evident that the public safety imperatively demands that the handling of poisons and the compounding of medicines generally should be entrusted to none but persons who have demonstrated their competence. This reform will not be accomplished by a few letters, nor by a few newspaper articles. Will the chemists as a body support an earnest movement in this direction carried on by men resolved to get from Parliament a definite Yes or No to their claim?

## The Menthol-market.

THE present position of menthol has special significance, owing to the fact that the peppermint-harvest in Japan has recently been concluded, and, simultaneously with it, Japanese merchants advanced their prices. To-day menthol is 3*l.* per lb. dearer in Japan than it is on the London market, and the reports regarding the stocks in Japan warrant the difference in values. In endeavouring to form an estimate of the present position it is necessary to go back to the years of plenty, which mainly have been responsible for the low prices that have ruled. It becomes difficult, when one glances at the annual totals dealing with this industry, to realise that, five-and-twenty years ago, menthol was a rarity in the European market. It was known and used here fifty years ago, but only as a proprietary medicine, and it was not until the early eighties that it began to be popular, and by 1883 there was quite a rush upon the article, and the price reached 60*s.* per lb. before the end of the year. At that time the area of peppermint-cultivation in Japan began to increase, and did not stop until 1888, when as low as 7*s.* 3*d.* per lb. was paid in London for menthol as imported. This sickened the Japanese peppermint-farmers, and during the years 1888-90 the area under cultivation of the plant diminished by 70 per cent. In 1891 the price had got back to about 10*s.* per lb., and the cultivation of the herb extended by nearly 40,000 acres, the increase continuing until 1896, which was a record year. The following figures for 1895-96 are from Government statistics of Japanese exports, the only difference being that

we have converted kins into pounds, so that the figures express the exports in pounds:—

	Menthol.		Oil.	
	1895	1896	1895	1896
To Germany ...	11,042	34,937	12,541	53,737
„ England ...	6,630	16,430	6,420	14,623
„ U.S.A. ...	8,961	10,797	—	—
„ Hong-Kong ...	6,136	13,661	4,867	36,397
„ British India ...	2,386	2,580	—	—
„ France ...	4,540	840	7,773	5,023
„ other countries ...	407	756	11,296	2,341
Totals ...	40,102	89,001	42,697	112,121

We have not Government figures for 1897 available, but the estimated production of oil (including menthol) that year was 140,000 catties against 223,200 catties in 1896. The production of 1898 has been estimated at 100,000 catties of oil (133,000 lbs.), and, as mentioned a fortnight ago, the stock of oil and menthol (not menthol alone, as then stated) in Japan at the end of November was 70,000 catties (93,000 lbs.). The Japanese view of the situation is given in the following translation of the report referred to:—

The average price of the 100 kin. (1=1½ lb.) of menthol in 1898 was 531 yen, being 109 yen lower than that of the year previous. The price thus fell as the supply rose, so that the market has almost been glutted, and the quotations fell continuously as the year advanced.

The oil exported during 1896 was 85,000 kin in round figures, the value being 234,300 yen. The average price of the peppermint oil last year (1898) was 279 yen and is 75 yen lower than a year before.

The lower prices of both menthol and oil have to a great extent stimulated the export-trade, though no doubt the quantity was shipped at a price far below the preceding average quotations per kin.

Of the foreign markets where the peppermints are consigned to from Japan, Germany stands first, as there they use them on a large scale for the pharmaceutical purposes. Germany imports a great quantity from several other countries. Those which are sent from the European and American producers to Germany are much finer in quality than those of Japan. Those produced in countries other than Japan are far finer and the grains of the crystals are more equal and purer, whiter, and of better fragrance. This is, no doubt, due to the imperfect method of manufacture adopted by the Japanese, but is attributable, in a lesser degree, to the climate and the soil, and the plants themselves.

Taking the oil and menthol together, it is obvious that the stock in Japan, allowing for some increase, is inadequate for a year. Stocks in Europe are not large. The run of prices during the past three years indicates that we are approaching a crucial point. From 1891 the price gradually rose until it touched 20*s.* per lb. in December, 1893, and in February of 1894 it began to decline, and varied between 15*s.* and 17*s.* 6*d.* during the rest of the year. In 1895 it fluctuated from 13*s.* 6*d.* to 15*s.*, and in 1896 it steadily declined from 13*s.* 6*d.* in January to 8*s.* in December. The two years following exhibited variations as under:—

	Jan.	Feb.	March	April	May	June
1897 ...	7/9	6/6	6/9	5/10	5/9	5/10
1898 ...	7/3	7/-	6/7½	7/-	7/-	7/-
	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897 ...	5/9	6/3	6/6	7/-	7/3	7/3
1898 ...	7/-	7/-	7/-	6/10½	6/10½	7/6

The advance this year is slight, but we have to await fuller information regarding the November-December crops. As far as we can ascertain, these will not bring the stocks in Japan above the yield of 1897—rather below it—so that a further advance is probable. Of course, it would be unwise to overlook the fact that the Japanese speculate freely in



peppermint-products, but the recent advance is too slight to give colour to the supposition that speculation is the only reason for the advance.

## Export Shipping-rates.

THE announcement that Mr. H. S. Cross, M.P. for Bolton, and other members have determined to press the Government to appoint a Committee to inquire into the operation of shipping "rings" is good news for exporters. Nothing of recent years has harassed our export trade so much as the stubbornness of the great shipping companies, and their short-sighted policy of grabbing all they can. By an ingenious method of rebate, amounting to 10 per cent. on the freight, which is paid some six or nine months after shipment of goods if the shipper meanwhile has patronised no outside line, the companies have effectually controlled the export trade and aborted opposition. In consequence of this freights have advanced by leaps and bounds, and "tramp" steamers to most of our colonies are becoming extinct. The damage to our export trade is not confined, however, to increased freights, for the companies have given a direct inducement to our chief commercial competitors by reducing freights by 20 or 25 per cent. for goods carried from Germany, and this without any stipulation or binding agreement. As the custom is steadily growing in favour with buyers in the colonies, of requiring quotations c.i.f. (cost, insurance, and freight paid) to colonial ports, it is obvious that our export merchants are handicapped in competing with Germany. The excuse offered for this proceeding is that the bounty frequently given to foreign shipping by the Governments compels our companies to reduce their rates. But why should British exporters have to pay for this game? Apart from the encouragement of continental competition by these unequal methods of dealing, our shipping companies are chiefly responsible for allowing Americans to get a footing in South African trade. Our correspondents have on several occasions reported the growth of the American druggists'-sundries business in the Cape, because buyers there find that freights from New York are lower than from London. This week we hear that a business in American bicarbonate of soda has been established, the first consignment (placed on the Cape market lower than English because freights are lower) having proved satisfactory. Comparatively few drug-houses in this country are directly interested in this question, but the few have good influence, and we trust they will join hands with chemical-manufacturers, and get such men as Sir John Brunner and Sir Albert Rolitt to support Mr. Cross's movement and press the Government for an early inquiry.

## Poison-storing Systems.

ALMOST every pharmacist has a system of his own for storing poisons, and the new Poison Regulations are sufficiently wide to admit most of them within their scope. The essential principle of the Regulations is that some system of storing poisons shall be adopted that shall differ from the mode of storing ordinary drugs in the same warehouse, shop, or dispensary. Three alternative systems are offered by the Regulations. One is that the container shall be "tied over, capped, locked, or otherwise secured in a manner different from that in which bottles . . . containing ordinary articles are kept." Tying over or capping poison-bottles is a very usual method of storing, and for those which have to be kept with other drugs nothing much better can be devised. Capping is the more usually adopted plan, especially as, in the case of volatile drugs like prussic acid and chloroform, it serves another

purpose also. Locking the stoppers of poison-bottles by means of spring-clips is a method which used to be more in vogue than it is now. It is a simple method, but it is not so suitable for bottles containing volatile drugs as capping. The clips, too, are liable to get out of order, and, in the case of careless assistants, may be left unsecured, which probably would not matter much in this case as the mere presence of such appendages to a shop-bottle would imply some unusual content. We have noticed in some pharmacies little bells, such as are often affixed to the collars of cats and dogs, affixed to the poison-bottles. These attract the attention of the customer as well as that of the chemist, perhaps with the result that the customer observes how carefully poisons are stored in that particular pharmacy. At the same time, the tinkle of a bell may often be disregarded, so that that of itself is hardly a sufficient precaution. Some pharmacists enclose their poison-bottles in tins, the tins being painted black, and labelled to match the shop-rounds so as not to interfere with the general effect of the shelves. This seems to us a perfect plan. Some chemists place dangerous poisons in out-of-the-way places so that there is some considerable trouble involved in getting at them. One is hardly likely to fetch and mount a ladder, or take a long walk and move a row of shop-bottles in a fit of absent-mindedness. We are not quite sure, however, that this method of storage would come within the official Regulations.

Rendering bottles distinguishable by touch from those containing ordinary drugs is a condition open to a very wide construction. It is generally taken as implying the use of ribbed or studded bottles. A correspondent a few weeks ago said he found the glueing of a strip of glass-paper an effectual method of distinguishing poison-bottles by touch.

The poison-cupboard is pretty generally in use in British pharmacies, and the poison-room occasionally, the latter being obviously confined to large businesses, or such as combine wholesale and retail trading. It is clear, however, that no one arrangement can be universally adaptable. There are businesses where arsenic or corrosive sublimate is dealt out as frequently as linseed-meal in others. What is insisted on is that wherever these are kept they shall be in packages made in some way distinctive, and labelled "Poison." Nothing can be more reasonable, and if we knew it we should shun that shop with holy horror whose proprietor made the smallest objection to any of these conditions. We do not remember to have heard of any recent accident resulting from careless storage, but there have been such, and nobody can tell when another may happen. Elaborate systems had better be left alone; their very irksomeness leads to their neglect. What should be aimed at is a simple system which, by its simplicity, will, while appealing to one or other of the senses, come within the requirements. If any chemists have any plan or device which seems to offer an advantage, it will be kind of them to explain it now for the general benefit.

### A VETERAN'S VIEWS.

No chemist should miss reading the address to the Liverpool Chemists' Association contributed by its lately-elected President, Mr. Edward Evans, sen. Mr. Evans tells his reminiscences of the drug-trade, looking back over it for seventy years, humorously and graphically. And he certainly gives us all reason to share in his own cheerful view of the progress and prospects of our vocation. We shall not many of us reach the dignities and honours to which Mr. Evans has attained, but at the same time it might be replied that not many of us have roughed it as he did in his youth. To start work at 6 A.M., not to be allowed to sit on the top of a barrel while picking gum, and to be expected to find our only mental recreation in the



Pharmacopœia, are conditions which deserve some ultimate reward. We are a little ashamed to learn that the *C. & D.* was founded principally with the object of promoting early closing, for we feel that if that was so we have not made much of a success in these forty years. But Mr. Evans is good enough to credit us with other services in the interests of the trade, and we are grateful for his kind recognition.

#### TWO GOALS EACH.

Some pretty play was shown in the match at Bradford on Tuesday, between the Pharmaceutical Society on the one hand and the Bradford herbalist on the other. First the Ceutics bought some paregoric from the unregistered herbalist, which it was found contained opium. That was the first goal. Three weeks later they bought some more: it contained no opium, but they did not analyse it. They summoned the herbalist in respect to both samples, and found out their mistake about the second afterwards. That equalised, and at half-time the scores stood one goal each. In the second half the Londoners again scored first goal by getting the referee to allow them a free kick in consequence of the foul. They said selling paregoric substitute was not fair play, and they got their second plaint amended, charging the Bradford man with having sold a B.P. article not compounded as the B.P. directs. After a long and very even contest however, the referee decided the next goal in favour of Bradford. The defendant had sold, but he had not compounded the paregoric, and so had not infringed that section of the Act. The Ceutics, who had played very confidently, were very sore at the decision, and pressed for a new match, to which the referee consented.

#### THE PRESS AND THE POISONS-REGULATIONS.

The *Daily Chronicle* was the first London paper to report the adoption of the Poisons-regulations by the Pharmaceutical Society. The *Chronicle* seemed to see in the vote a sinister blow aimed at proprietary medicines. It happens that chemists had forgotten proprietary medicines in this connection, but the *Chronicle* is right when it states that the resolutions, if carried into legislative effect, will affect these goods. At any rate, they will necessitate that those containing poisons shall be sold in bottles distinguishable by touch. The *Chronicle* is good enough to add its testimony to that of one of the speakers of the meeting, that the mistakes in dispensing are very few in comparison with those made in nursing or in private life. The *London Morning* reported the resolutions, but only expressed the anticipation that they would have the effect of reducing to a minimum the possibility of error arising from the careless handling of poisons by chemists. The *St. James's Gazette* described itself as "very glad indeed" at the announcement that the Regulations had been adopted. So if they do no other service they will not have been passed in vain, as they have added so much to the happiness of holy James.

#### THE U.S.P.

Next year American pharmacists and physicians will appoint a committee to revise the United States Pharmacopœia. The incoming committee will find everything shipshape for them, as it is one of the functions of the committees decennially appointed to keep records of criticism up to date. We have received from Dr. Charles Rice, President of the Committee, a copy of the second part of "Digest of Criticisms," which contains abstracts of papers printed up to December 31, 1897, in forty-nine American and foreign publications. Mr. Hans M. Wilder, of Philadelphia, a master-hand at abstracting, has prepared the digest, and for the first time suggestions as to tests are added, which have been worked out by Mr. Carl E. Smith. The work is, of course, equally available for other Pharmacopœias. It is surprising that the Pharmacopœia authorities of all nations do not co-

operate in this matter. There is work for all in it, and it would be infinitely better to do this than to dream of an International Pharmacopœia, which nobody seems to want.

#### THE VARIOUS KINDS OF ALOES.

At a recent meeting of the Manchester Therapeutical Society Professor D. J. Leech read a paper on the action and uses of the various kinds of aloes, pointing out that little, if anything, is known as to the comparative activity of the various kinds of aloes. Barbados and Socotrine are official in Great Britain, but Cape aloes is the only official variety in some foreign Pharmacopœias. Squire states that Barbados aloes is one-third stronger than Socotrine, but gives no authority. Dobson and Tilden from their experiments conclude that barbaloin is rather more active than socoloin. Professor Leech appealed to the members of the Society to aid in the investigation of the relative value of the different kinds of aloes; and this appeal can advantageously be taken up by a wider circle. It is, however, desirable that doctors who take up this subject should know exactly what they are working with. There are various kinds of aloes going under the same name; not only so, but all kinds of aloes vary in activity according to their age. It is, therefore, most desirable that therapeutists who take this matter up should get the aloes as imported.

#### INVENTED WORDS COMPETITION.

Our request for a vote on the invented words published in our issue for December 31, 1898, has been answered by 143 votes. We asked competitors to name the five words in the list which they thought the cleverest; and an analysis of the voting brings the following out as the leading five:—

Kwickshine (for blacking), 44  
Tredeeze (for a foot-powder), 43  
Laxilene (for a mild aperient syrup), 39  
Boswin (for beef-wine), 35  
Dentaline (for a tooth-preparation), 32

It may be interesting to give the votes recorded for some of the other words. We quote in their proper order all those which secured five or more votes:—

Cyclistol, 31; Eradico, 30; Stitchol, 29; Pearline, 23; Emoline, 22; Exops, 21; Kepsuit, 20; Pedicoline, 19; Caput cure, 18; Rubino, 18; Contusine, 18; Crepilo, 17; Euphrasine, 16; Ovagen, 16; Tanglo, 16; Dentalba, 14; Forsitt, 13; Nebula, 13; Jecorinc, 11; Flypresto, 8; Idealine, 8; Crinidine, 7; Calluscide, 7; Phragrana, 7; Barnon, 6; Klondets, 6; Ollapearl, 6; Fantine, 5; Osvesico, 5; Primollia, 5; Zilareau, 5.

The inventor of Kwickshine is entitled to our first guinea. This was Mr. W. Kirby, Market Place, Thirsk, but as Tredeeze ran the winner so closely we shall award the sender of that word, Mr. D. Croft, Crowle, Lincolnshire, an extra prize of 10s. It now only remains to discover the most successful forecast of the five words which proved to be the favourites. No fewer than nineteen competitors selected three of the five leading words. Of these we find that Mr. J. A. R. Lee, 56 Stanhope Street, Derby, was the most successful in anticipating the exact order of the general opinion. His card reads as follows:—(1) Kwickshine. (2) Tredeeze. (3) Laxilene. (4) Kepsuit. (5) Eradico. The guinea for this competition goes to Mr. Lee.

WHEN you have anything to advertise to the drug-trade this is the journal to do it in.

VANILLIN occurs in cork. A correspondent of the *Pharm. Centralt.* mentions the fact, and the Editor adds that the occurrence was observed by a Dresden chemist in 1889.

"WHAT DO YOU CONSIDER THE BEST WORK ON PERFUMERY?" asks a correspondent of the *Spatula*, to which our contemporary replies: "The chapter on perfumery in 'Pharmaceutical Formulas' contains the most in this line of any, in that the new synthetics are described and comments are made upon them. We think this is the most practical and useful collection published."



## Legal Reports.

### The Pharmacy Act.

#### PAREGORIC AND PAREGORIC-SUBSTITUTE.

AT Bradford County Court, on January 17, before Judge Bompas, Q.C., and a jury, the Council of the Pharmaceutical Society of Great Britain brought an action against James Robinson, herbalist, 54 Barkerend Road, Bradford, for two penalties of 5*l.* each for alleged breaches of the Pharmacy Act, 1868. Mr. R. E. Vaughan Williams, of London, appeared for the plaintiff Society, and Mr. James Freeman represented the defendant.

Mr. Vaughan Williams asked to be allowed to amend the particulars in regard to the two complaints. The complaints were in regard to the sale by the defendant of paregoric. The first sale complained of was made on October 29, 1898. The second complaint was for a penalty for the sale of paregoric elixir on a subsequent date. But upon analysis of the second sample it was discovered that it contained no poison. Consequently the plaintiffs now desired to ask for a penalty in respect of another part of the same Act, which made it an offence to compound medicines of the British Pharmacopœia unless they were made up according to the Pharmacopœia. The other side had had due notice of the proposal to amend.

His Honour allowed the complaint to be amended.

Mr. Williams then, in opening his case said their witness made the second purchase of paregoric because long experience had taught them that it was desirable, in the interests of justice, not to rely upon a single instance. The contents of the bottle purchased on October 29 were found to contain nearly 2½ gr. of opium. The bottle purchased on November 19 was not at first sent to the analyst, because it was not thought necessary to incur the expense, as in many cases the solicitors had only to inform people that they had broken the Act to secure payment of the penalty. But in answer to their letter the solicitors to the Society got a letter from Mr. Freeman stating that the mixture sold to Mr. Foulds did not contain either opium or any other poison, and that the Bradford City Analyst had analysed a quantity and had certified that it was absolutely free from opium. Mr. Eastes, who had analysed the sample first purchased, then analysed the second sample, and found it to be free from opium. It then occurred to the Society that if the second sample was sold as a medicine of the Pharmacopœia, and did not contain poison, another offence had been committed.

Arthur Foulds, inquiry agent, Manchester, proved the purchases, and Ernest John Eastes, analyst, London, described his analyses of the samples. The latter, in cross-examination, said he had known analysts to disagree, but he could not see how the result of the analysis made by Mr. Richardson could be different from his own in regard to the first sample, if both samples were taken from the same bottle—the method of ascertaining whether opium was present or not was so clear and definite.

For the defence it was contended that neither of the samples sold to Mr. Foulds contained poison. It was further contended that the mixture was not sold as genuine paregoric, which should contain opium, but as "paregoric-substitute."

The defendant said he bought the mixture from Brook Parker & Co., of Bradford, as "paregoric without poison." He had never sold any mixture containing poison, and he had been in business for sixteen or seventeen years. Defendant also swore that he sold Mr. Foulds 2 oz. on each occasion, and that he told the latter that it was "paregoric-substitute." He had only one bottle of paregoric, and he supplied Mr. Foulds from it on both occasions.

The stock-bottle was produced. It bore two labels, one "Paregoric elixir" and the other "Paregoric-substitute."

Cross-examined by Mr. Williams, defendant said the part of the bottle bearing the label "Paregoric-substitute" generally faced the wall in his shop. Asked why he labelled Mr. Foulds's bottles "Poison," he at first said he did it as a precaution, but, on Mr. Williams pointing out that there was no need for precaution if the mixture did not contain poison, he said he could only say that he did it in mistake.

Mr. F. W. Richardson, City Analyst, Bradford, said he analysed a quantity of "paregoric" which was taken to him by the defendant, and was unable to find any trace of opium in it.

Cross-examined by Mr. Williams, he said he had no evidence to show that the liquid he analysed came from the same bottle as the first sample which Mr. Eastes analysed. After Mr. Eastes' evidence he could not doubt that there was opium in the first sample which that gentleman analysed.

His Honour held that to recover the penalty in the second complaint it must be shown that defendant compounded the mixture which was sold by him. Compounding meant something more than mere selling or retailing; it meant some form of manufacturing, and there had been no evidence whatever to show that the defendant had done this. With reference to the other complaint, they had in the two phials produced by Mr. Eastes something very like proof that defendant was mistaken when he said that both samples were sold out of the same bottle. He asked the jury to answer the following questions:—(1) Did the liquid sold by the defendant on October 29 contain opium? (2) Was the liquid sold by the defendant on November 19 free from opium (and both sides agreed that it was)? (3) Was the liquid sold by defendant on November 19 sold as paregoric elixir?

The jury gave an answer in the affirmative to each question, and his Honour then entered judgment for 5*l.* on the first complaint.

Mr. Williams asked leave to appeal against his Honour's interpretation of the word "compound." He said the point involved was one of great public interest.

Mr. Freeman objected to leave being given, on the ground that his client was not in a position to bear the costs of an appeal.

After some discussion his Honour gave leave to appeal, on condition that the appellants would undertake to pay the respondent's taxed costs in the event of the appeal being successful.

#### THE SOCIETY BAULKED.

THE Pharmaceutical Society figured as defendant in an interpleader action heard at the Grimsby County Court on January 17. The claimant was a Mrs. Austin, of Cleethorpe Road. Mr. Mason appeared for Mrs. Austin, and Mr. Flux, of London, represented the Society. A short time ago the claimant's husband, who carries on business as a herbalist and teeth-extractor, was summoned by the Pharmaceutical Society for practising as a chemist without being duly qualified, and judgment for the Society was given. When the judgment came to be enforced Austin intimated that his wife was the sole owner of the furniture and stock, and it was to test this that the present action was heard. Mrs. Austin declared that prior to 1888 her husband was sold up, and that she was lent 5*l.* by a friend to purchase some bedding and furniture for one room. Subsequently she started business as a pork-butcher, and in that business for some eight years she had a turnover, as proved by her bank pass-books, of upwards of 3,000*l.* Out of that she acquired sufficient to refurnish a home, and to start her husband in business. She swore that the whole of the herbal stock was her property. Mr. Austin, who described himself to the Judge as an "unqualified chemist," corroborated, and stated he handed all moneys received to his wife, who renewed the stock from time to time. Mr. Flux, who did not call any witnesses, pointed out that at the hearing of the action Mr. Austin had admitted he was the owner of the business. His Honour, however, could not get over the documentary evidence produced by Mrs. Austin, and found in her favour.

#### The Musc-Baur Patent.

THE action brought by the Fabriques de Produits Chimiques de Thann et de Mulhouse against Messrs. Laffitte & Co., in the Chancery Division, before Mr. Justice Byrne, alleging infringement of the Baur Patent No. 4,963 of 1889 for the manufacture of artificial musk (the commencement of which was reported last week), was resumed on January 12.

Professor Dewar continued his evidence, and Dr. A. Liebmenn also gave scientific evidence agreeing generally with that of Professor Dewar.



Mr. Cripps, Q.C., in opening the defence, said that, as Professor Dewar had admitted, there was no question that before the plaintiffs' patent the production of artificial musk was no novelty. One question for the Court was whether the invention, or, rather, the grant to Messrs. Schnauffer & Hupfeld, was of such a nature as to invalidate the grant to Dr. Baur, because after the grant to them the subsequent grant did not contain anything in the nature of a true invention. Mr. Cripps contended that the plaintiffs' letters-patent were bad, on the ground that Baur was not the first and true inventor. He denied that his clients had infringed, contending that their process was a chemical equivalent for the plaintiffs' process, and relying on the fact that they took xylol, whereas the plaintiffs took toluol. The defendants, he said, got butyl-xylene, which was not known at the date of plaintiffs' specification, and was excluded by the terms of it. The plaintiffs took toluol, and because xylene was what they had called a higher homologue they got a trace in it, although it distilled at a much higher temperature. If he substantiated that, he submitted it was a case of no infringement.

Dr. F. W. Passmore, for the defence, said he was an analytical and consulting chemist and a doctor of philosophy of the University of Wurzburg. He had made a special study of the preparation of artificial perfumes, and was acquainted with Dr. Baur's specification, and with the artificial musk of the defendants. The production of artificial musk, or a substance having a musk-smelling odour, was not novel at the time of Baur's specification. Toluol was methyl-benzene, and if he asked for pure commercial toluol he would look upon xylene as an impurity. Witness was then taken through the process of manufacture, and gave it as his opinion that there was such a difference in that respect between the plaintiffs' and the defendants' processes that the defendants' was not an infringement of the plaintiffs'.

Dr. Alfred Gordon Salaman, F.I.C., and Vice-President of the Society of Chemical Industry, said he was also a technical director of a very large factory where they made artificial perfumes almost exclusively. Witness said that starting with toluol they got a group different from that when xylol was used.

Counsel having addressed the Court,  
Judgment was reserved.

### Royal Baking-powder Company v. Wright.

In the Chancery Division of the High Court, on January 17, Mr. Warmington, Q.C., applied on behalf of the plaintiffs for a commission to examine witnesses abroad. The action was to restrain the defendants (a Liverpool firm) from passing off their goods as and for the goods of the plaintiffs. The plaintiff company were makers of "Royal Baking-powder," and the defendants only did a small business in baking-powder in the Liverpool district. The plaintiffs sought to prevent the defendants from selling baking-powder under the name of "Royal," not only in the United Kingdom, but also in America and the Colonies. If his Lordship thought a commission should go, the parties were agreed that it should take the form of a special examiner. Since the matter was adjourned the defendants had filed an affidavit, the only material point in which was the statement that there was no intention, as far as the defendants were concerned, of trading in the U.S. If that was put in a form binding on the defendants the plaintiffs did not want a commission to the U.S., but as the defendants were beginning a trade with Canada, Newfoundland, the Cape, and the Colonies, the plaintiffs asked for a commission to examine the witnesses in these places.

Mr. Justice Romer said that when an action was brought in this country to restrain persons from passing off their goods as the goods of the plaintiff, if they were going to rely on a passing off in a foreign country it should be specially alleged, and, if he remembered rightly, there was nothing in the statement of claim to show that.

Mr. Warmington pointed out that the defendants had not asked for particulars.

Mr. Justice Romer said that might be so, but the plaintiffs were bringing an action for something done outside this country altogether, and that should be specifically stated.

Mr. Warmington said this was a new point.

Mr. Justice Romer thought it was suggested in Chambers. Mr. Neville, Q.C., on behalf of the defendants, said that was one point, but he had a great many others, and would remind his Lordship that this case had passed into the list, and would have been tried to-day but for this application.

Mr. Justice Romer said as the statement of claim was confined to something done in this country, a commission was not necessary. The plaintiffs had better proceed with the action as it was. That would not prevent them from bringing other actions for anything done outside this country.

Mr. Warmington said the plaintiffs sued the defendants in a sense of nothing beyond what was done here, but what was done here was shown by what they did abroad.

Mr. Justice Romer said in a matter of this kind he should never be persuaded that it was relevant to find out what was done abroad. In reply to Mr. Warmington he said he would give leave to amend, but the costs must go to the defendants in any event. He also consented to allow an adjournment for witnesses to be brought.

Ultimately it was arranged that the action should remain out of the list for a month, but Mr. Dickenson, who also appeared for the plaintiffs, applied for leave to appeal, and Mr. Justice Romer acceded.

### Alleged Chemical-works Nuisance.

At the Croydon Petty Sessions, on January 14, Messrs. Forster & Gregory (Limited), chemical-manufacturers, Mitcham, were summoned at the instance of the Croydon District Council under the Public Health Act for causing a nuisance by sulphuretted hydrogen.

Mr. James Wilson, Clerk to the District Council, appeared in support of the summons.

Mr. W. H. Dees, who represented the defendants, asked for an adjournment in order that the magistrates might have an opportunity of inspecting the premises with experts on each side.

The Chairman said the Bench would first hear some of the facts.

Mr. Wilson said the defendants were an old-established and much-respected firm, carrying on business at Mitcham, and Mr. Forster, their managing director, was in court. They were summoned under Section 91 of the Public Health Act for causing a nuisance in a certain watercourse by allowing an obnoxious effluent to flow into a public ditch. When the Inspector of Nuisances visited the factory he found thirty or forty large tubs, from which hot liquid was flowing into the drains. The liquid found its way through a pipe into a ditch. At one time the factory was isolated, but now it was practically surrounded by buildings. In a reported case heard at St. Helens, it was found that, instead of draining into a public watercourse, the liquid ran straight into the sewer. There were two drains—in one the liquid was impregnated with muriatic acid, and in the other the liquid was impregnated with sulphur, and sulphuretted hydrogen was produced and escaped in sufficient quantities to be injurious to health, and it was held that the escape of gases was a nuisance. The Bench would find that the present case was identical with the one he had referred to, which was that of the St. Helens Chemical-works v. the St. Helens Corporation, reported in No. 34 *Law Times*, page 397. Mr. Wilson concluded by saying that the only object of the present proceedings was to secure an abatement of the nuisance.

Mr. Dees said his clients were only too anxious to abate the nuisance, and the only way was for the experts to visit the premises together.

The Chairman said the Bench would like to hear something about the nature of the nuisance before they acceded to Mr. Dees' request.

Mr. Wilson said the substance of it was that there was a stench which was annoying and injurious to health. The medical witnesses would tell them that the effect of the sulphuretted hydrogen was that it was absorbed by the skin, the lungs, and stomach, and in large quantities was poisonous; and it depressed the action of the heart and decomposed the corpuscles of the blood.

Mr. Dees said directly his clients received the summons they wrote to a medical expert, who had asked for a further opportunity of considering the matter. They took steps a



great cost to purify the liquid, and it was now a question whether the steps taken were sufficient or not.

The Chairman said Mr. Dees seemed to have very respectable clients, and the Bench were satisfied that they did not intend to resist the authorities.

Mr. Wilson said Mr. Forster stated that the abatement of the alleged nuisance in the way asked for would ruin the firm's business.

In granting the adjournment the Chairman said he had no doubt the defendants would be able to satisfy the public requirements, and that the District Council would not be unreasonable in their demands.

## County Court Cases.

### DENTAL LITIGATION.

At Melton Mowbray County Court, on January 12, J. H. Todd, manufacturer of artificial teeth, Melton, was sued by Maria Bratnell for 4*l.*, the value of artificial teeth not returned. Defendant had agreed to pay plaintiff 50*s.* on the claim and 25*s.* costs, but he now declined to carry that out, stating that it would do harm to his practice, and he preferred to have the case tried. The Judge held that defendant was bound by the agreement, and entered judgment for 3*l.* 15*s.* and 15*s.* costs.

At Northampton County Court, on January 12, Mr. C. S. Gray, dentist, sued Mr. G. Harrison for 5*l.*, value of a set of artificial teeth supplied. It was alleged that the teeth did not fit, and defendant called as a witness Mr. Horace Wallis, of the "Northampton Medical Institute," who described himself as a mechanical dental expert, possessing American diplomas. The Judge declined to accept the evidence of Mr. Wallis, and the case was adjourned for the production of other expert evidence.

At Wolverhampton County Court, on January 13, before Judge Young, a stable-lad named Wm. Pike sued Dr. Bebb for 25*l.* damages for alleged negligence in extracting a wrong tooth. Dr. Bebb said he extracted the right tooth according to plaintiff's instructions, but when he got it out he noticed there was a bad abscess at the root of it. On looking into plaintiff's mouth he saw that the adjoining molar had come out with it, and was lying on the gum. He also found that a bony growth had formed at the bottom of the socket of the diseased tooth, uniting it to the adjoining tooth, so that it was impossible to draw the one without the other. Judgment was given for the defendant, with costs.

## The Apothecaries Act.

At the Huddersfield County Court, on January 12, before Mr. V. T. Thompson (Deputy-Judge), Thos. Owen Davies, of Linthwaite, was sued for a penalty of 20*l.* and costs for having practised as an apothecary without having the Society's licence. The defendant neither appeared, nor was he legally represented. Mr. Ramsden, who appeared for the Society, stated that the defendant had admitted his liability. He was formerly an assistant in the service of Dr. Dean, of Slaithwaite, who dispensed with his services when unqualified assistants were prohibited from practising as medical men. Defendant had, however, continued to practise. The Society did not wish to be vindictive, and he therefore asked that judgment should be given for the amount mentioned with costs, and he would undertake to advise the Society not to press for the 20*l.* if defendant would give a satisfactory guarantee not to repeat the offence, and undertake to pay the costs.

Judgment was entered for the amount claimed, with costs.

## Looking after a Capsule-factory.

At Clerkenwell Police Court, on January 16, Messrs. Betts & Co. (Limited), capsule-makers, of Wharf Road, City Road, E.C., were summoned at the instance of Miss R. E. Squire, inspector of factories, for not providing suitable washing-

conveniences in departments where lead was used. Miss Squire pointed out that lead and tin were used in the manufacture of the capsules and lead was also used in the paint for colouring them. About 200 women were employed in these departments. There were no towels or nail-brushes provided, the sinks in which the girls washed being also used for trade purposes. She suggested that one basin to every six persons should be provided, and that towels, soap and nail brushes be within the reach of the girls. The Magistrate made an order that the suggestions of Miss Squire should be carried out in defendants' factory.

## Drinking Wine on the Premises.

At the Newcastle Police Court, on January 13, William Potts Philipson, described as a chemist at Spital Tongues, was charged with having sold wine contrary to the terms of his licence. Defendant had an off-wine licence, but evidence was given that on December 27 several boys went to the shop and bought three bottles of wine, which they were allowed to drink on the premises. One of the boys became ill as the result, and his father reported the matter to the police. It was said that the defendant himself shared in the contents of the first bottle. For the defence it was stated that the first bottle was not paid for, and that the three bottles altogether represented a very small quantity, as the bottles were exceedingly small. Defendant had only had the licence a short time, and was not aware that he had committed an offence. The Bench imposed a fine of 5*l.* and costs, and ordered the licence to be endorsed.

## Lamps on Petroleum Vans.

It is likely that the summonses in Metropolitan police courts against petroleum carriers for having no lights on their vans after nightfall will lapse, because the Police Commissioner appears to realise the difficulty of two laws clashing. Summonses had been taken at the North London Court against Messrs. Carless, Capel & Leonard, chemical manufacturers, of Hackney Wick; and on Monday, Inspector Osgood asked the Magistrate to adjourn them *sine die*, as the Police Commissioner had not quite made up his mind what he would do. It appears that one law says a petroleum cart shall not carry a light, and another law says that all vehicles on a public highway, after dusk and before dawn, shall be supplied with a lighted lamp. We believe Messrs. Carless, Capel & Leonard will solve the difficulty by having a lamp of which the Board of Trade will approve as safe even on a petroleum cart.

## Sale of Food and Drugs Act.

### SEIDLITZ-POWDERS.

At Castle Eden Petty Sessions, on January 16, John Cook, grocer and general dealer, Trimdon Grange, was prosecuted for selling seidlitz-powders which were deficient in tartaric acid. Evidence of the purchase of six seidlitz-powders was given by the inspector. Two were sent to the county analyst, who certified that one was deficient in tartaric acid to the extent of 30 per cent., but the other was genuine. The prosecuting inspector stated that, as this was the first prosecution of the kind in the county, he would be satisfied if defendant was ordered to pay the costs. For the defence it was stated that defendant had written to the wholesalers who supplied the powders, but they replied that, owing to the time which had elapsed since they were bought, nothing could be done in the matter by them. The Chairman said he was glad the inspector was giving his attention to these powders, and, in accordance with his desire not to press the case, a fine of 1*s.* and costs would be inflicted.

Another case was heard, the defendant being Andrew Young, also a grocer and general dealer at Trimdon Grange. A similar purchase was made, the analyst certifying in this case that one powder was deficient in tartaric acid to the extent of 28 per cent., and the other 14 per cent. The Inspector said further that since the issue of the summons against defendant the wholesale house from whom the powders were obtained had informed him that they had



tested the two powders left with defendant and found them both deficient. They had agreed to call in all the other powders they had supplied, and to give instructions to their staff to be careful in future. Under these circumstances he thought defendant was not to blame, and he asked for costs only. A fine of 1s. and costs was imposed.

#### BORACIC ACID IN MILK.

At Kensington Petty Sessions on January 17, the West London Dairy Company (limited) were summoned for selling milk containing 30 grains per gallon of boracic acid.

Mr. Chas. Cassal, the public analyst, said boracic acid was injurious to health, but he could not say definitely what its chemical effect upon the human body was. Dr. Dudfield, medical officer of health, said that, in his opinion, boracic acid would have an injurious effect, except when given in small quantities. Taken to the extent of 30 grains per gallon it would injuriously affect the digestive process. He had never tried the experiment, and did not agree with Dr. Ball, of Glasgow, in saying that 10 grains of boracic acid could be given four times a day for 17 years.

For the defendant it was submitted that the boracic acid was not used as an adulterant; the acid so used was not injurious to health; nor was it used fraudulently to increase the bulk of the milk.

Dr. Thomas Bond, F.R.C.S., senior surgeon at Westminster Hospital, said that he had for 20 years past given, with good results, boracic acid to old men suffering from urinary troubles, and he believed that no injurious effects would follow the use of boracic acid in the present case.

Dr. F. A. Farr, M.R.C.S. Lond., M.R.C.P. Edin., of Earl's Court Road, W., said that he had often used boracic acid for adults with satisfactory results, but could not say what its effect would be upon children. He had never known the acid to interfere with digestion.

Mr. A. Hailes, consulting and analytical chemist, Holborn, said he considered it advisable to add boracic acid to milk, unless one could ensure its being absolutely pure, which was scarcely practicable in London.

The majority of the magistrates were of opinion that the acid was injurious to health. A fine of 40s. with costs was imposed.

#### EUCALYPTUS OIL.

At Clerkenwell Police Court, on January 18, Messrs. Lewis & Burrows (Limited) were summoned for selling oil of eucalyptus which did not conform to the requirements of the British Pharmacopœia. For the prosecution Mr. Bramall stated that the sample purchased showed the presence of phillandrene, did not conform to the cineol test, and was not up to B.P. sp. gr. The sample purchased was labelled "Oil of Eucalyptus, prepared from the Australian Blue Gum Tree," and the purchase was made at defendants' shop in Seven Sisters Road. Four ounces were obtained, for which 1s. 3d. was paid, which was slightly dearer than other eucalyptus oil the inspector had purchased.

Mr. Germain, for the defence, said the certificate was based upon a supposed standard in the British Pharmacopœia. He submitted there was nothing whatever in the Act of Parliament which dealt with or contained any reference to the British Pharmacopœia. The Committee sitting on the Food and Drugs Bill of 1879 before it became an Act of Parliament refused to include the British Pharmacopœia as a basis or standard upon which analyses should be made. Therefore it was not a legal test.

Mr. Horace Smith (the Magistrate): What is a legal test?

Mr. Germain: A test based on the recognised usage in the medical profession or in commerce.

After further legal argument, Mr. Germain admitted that where a drug was an element in a compound then it should be up to the standard prescribed by the British Pharmacopœia. If his clients had sold the eucalyptus oil for the purpose of being an ingredient in a compound, then he would admit that the British Pharmacopœia was a standard. But where something was bought in the ordinary pursuance of trade, and not for the purpose of compounding, it was then for the evidence to satisfy the Magistrate that there had been some adulteration which brought the person selling within the purview of the section of the Act of Parliament. This

sample was not bought for the purpose of being compounded.

Dr. Teed gave evidence of analysis, saying that the presence of so much phillandrene has an irritating effect. He believed the sample would conform to the standard of the 1885 B.P. There are 130 varieties of eucalyptus, and many kinds of oils prepared from eucalyptus, but the variety most used in medicine was the oil of eucalyptus globulus.

Cross-examined: Does the test in the old Pharmacopœia apply to globulus or amygdalina?—I don't think it applied to either.

Do you know that in the Pharmacopœia of 1898 amygdalina oil is omitted?—The only oil mentioned is the globulus.

Is it not a fact that the reputation this oil enjoys is due entirely to eucalyptus amygdalina?—I can't say.

Mr. Germain: My case is that this oil sold by the defendants was eucalyptus amygdalina, and is not subject to the test because it is omitted from the Pharmacopœia.

Dr. Teed said he believed that the sample purchased was amygdalina oil.

Mr. Germain said eucalyptus amygdalina was omitted from the Pharmacopœia of 1898 because it would not satisfy the test laid down by the Medical Council, who knew it was being sold, not for the purpose of compounding, but to people who used it for other purposes.

Mr. Horace Smith was of opinion that the sample sold in this instance was sold as a medicine, inasmuch as the label on the bottle directed it to be taken in doses in sugar.

Herbert Collins, analytical chemist, said eucalyptus amygdalina was formerly sold, but was not now included on the British Pharmacopœia.

Dr. Samuel Rideal, of Victoria Street, Westminster, public analyst to the Lewisham District Board of Works, said eucalyptus amygdalina was first sold, and now both that oil and the globulus variety were used indiscriminately, and practically for the same purposes—viz., as deodorisers, internal application, in compounding unguents, and for doctors' prescriptions. The amygdalina oil was still commonly sold. If an ordinary person asked for eucalyptus oil he would expect to get oil made from the eucalyptus leaf. From the analysis of the sample in question that condition had been complied with. If a prescription containing "B.P. oil" were presented to a chemist, then only would it be necessary to give the globulus oil. Many articles in the British Pharmacopœia did not comply with the test there laid down. If he asked for hard soap he should not expect to get the exact article described in the British Pharmacopœia. Other articles he might mention in this connection were mustard and carbolic acid. If he were asked for eucalyptus oil for the purpose of treating a cold he should recommend amygdalina.

Mr. Horace Smith decided against the defendants, and imposed a fine of 18s. and 1l. 1s. costs.

Mr. Germain applied to the Magistrate to grant a case, which application was granted.

#### THE EUCALYPTUS PROSECUTIONS.

THE promptitude and activity of the Islington Vestry in starting so soon a plan of campaign under the fresh requirements of the British Pharmacopœia are conspicuous. A conviction was obtained, but we cannot help thinking that the action was a little premature and somewhat hard on the pharmacist. The authorities need not have gone so far as to have actually prosecuted for the sale of a drug which last year was in compliance with the British Pharmacopœia but which is not so now. Surely a warning to the druggist would have had the desired, as well as a salutary, effect, and have given him a hint to get rid of his old stock and to replace it with new.—*Lancet*.

RUBBER GOODS AND GLASS BOTTLES.—Consul-General Stowe, of Cape Town, writing to a New York druggists' sundriesman, says that the white rubber goods manufactured in the United States will soon have the trade in South Africa, for no other foreign manufacturer has as yet been able to produce a quality which will stand the climatic conditions. The Consul also says that the white glass bottles manufactured by the United States are superior to those of any other make, and he questions if they can be imitated.



## Bankruptcies and Failures.

*Re* R. LECOMTE, 17-19 East Howard Street, Glasgow,  
Manufacturing Chemist.

THE petition for cessio in this case shows liabilities 264*l.* 9*s.* 2*d.*, and net assets 26*l.* 2*s.* 10*d.*. The debts are largely due to newspapers.

*Re* EDWIN MANN, 31 West Derby Road, Liverpool, Chemist and Druggist.

THIS debtor was examined at the Liverpool County Court on January 12. In the course of the proceedings he stated that he had been in business at the above address for about three years, and had previously been in business at West Kirby, where he had also failed. Messrs. Ayrton and Saunders, of Liverpool, were the trustees under that deed, and he had been informed that they had paid 13*s.* in the 1*l.* His present debts had been increased by the fact that two of the creditors under the previous failure, who had stood out of the composition, had brought their debts into the present statement. He admitted that he had been insolvent all last year, but said the creditors knew his position and permitted him to go on. At his West Derby Road shop he had a Post-office, which was worth 68*l.*, but he had to pay a postal assistant 15*s.* a week. His statement of affairs, as given in our last week's issue, was repeated, and the case was eventually concluded.

*Re* WILLIAM JOSEPH WILSON, of 176 Moseley Road, Birmingham, Chemist's Manager.

THE public examination of this bankrupt took place on January 16, at Birmingham, before Mr. Registrar Glaisyer. The liabilities amount to 189*l.* 7*s.* 6*d.*, and the assets are valued at 19*l.* 8*s.* 11*d.*. Replying to questions put by the Official Receiver, the bankrupt said this was his third failure. He commenced business as a chemist in 1881, at Park End Street, Oxford, with about 50*l.*, which he had saved. In the following year he made an arrangement with his creditors. He owed 300*l.* and paid a composition of 5*s.* in the 1*l.* He continued trading until February 6, 1893, when he filed his petition in the Oxford Court. He then owed 1,158*l.* 6*s.* 11*d.*, and his assets amounted to 617*l.* 4*s.* 11*d.*. He paid 10*s.* in the 1*l.* He obtained his discharge in August, 1894, and was suspended for about eleven days. He next moved to Birmingham, where he obtained a situation as a chemist's manager. Subsequently he was out of employment for about five months, and during that time he got into debt. In the end of 1896 he borrowed from professional money-lenders. Between February, 1893, and August, 1894, he occasionally acted as *locum tenens*, but he was not paying his way. From one money-lender he borrowed 80*l.*; he had repaid 70*l.* and still owed 45*l.*. In January of the present year he borrowed 30*l.* from the Birmingham Deposit Company, which he expected to be able to pay by easy instalments, but a week later he was discharged from his situation, and between January and July he had only done an occasional week's work. The Official Receiver: Ever since your failure at Oxford in 1893 you have simply been kept going by borrowing money? Bankrupt: I had to find money somewhere to exist. Six of the nine creditors to whom he owed money in 1897 had sued him, and in his deficiency account he took credit for having expended 41*l.* in law charges. He kept no books. The examination was concluded.

## Deed of Arrangement.

Clotworthy, Samuel, trading as "Samuel Clotworthy & Co.," 14 and 16 Gordon Street, Belfast, chemist. Dated, January 12; filed, January 14. Liabilities unsecured, 1,219*l.*; assets, 560*l.*. Petition for arrangement and affidavit of assets and liabilities.

## Gazette.

### PARTNERSHIPS DISSOLVED.

Hammersley, P. H. V., and Heasman, F., Leek, medical practitioners.

Sullivan, P., and Hamel, J., under the style of Sullivan & Hamel, Campbell Road and Bruce Road, Bow, E., general medical practitioners.

### THE BANKRUPTCY ACTS, 1833 AND 1890.

#### ADJUDICATIONS.

Buist, James Joseph, Cardiff, bachelor of medicine.

Fraser, Robert William, Upper Owmtwrch, Breconshire, bachelor of medicine.

Partington, John, Horwich, mineral-water manufacturer.

Robbins, Francis, Shrewsbury, cattle spice and food manufacturer.

## New Companies & Company News.

FROZO (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. Objects: To carry on the business of makers of, and dealers in, mineral and aerated waters, beverages, fruit and other drinks, syrups, essences, &c. Registered without articles of association.

THE WILSON FILTER SYNDICATE.—Registered in Scotland. Capital 1,500*l.*, in 1*l.* shares. Object: To acquire from the inventor, John Wilson, analytical chemist, 1 Hill Street, Garnet Hill, Glasgow, his whole property and rights in the invention known as the Wilson Filter, for which he has obtained provisional protection.

HARSTON & CO. (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on at Leeds and Harrogate, Yorks, as "Harston & Co.," and to manufacture, sell and deal in mineral and aerated waters and other beverages, essences, cordials, &c. Registered office, 11 Bowman Lane, Leeds.

W. H. JAMISON (LIMITED).—Capital 15,000*l.*, in 10*l.* shares (750 preference). Objects: To acquire the business carried on at Dulinfield, Cheshire, by Sarah Jamison, as "W. H. Jamison," and to carry on the business of manufacturers of tannin and other wood, animal, vegetable, and mineral extracts, liquids, dyes, chemicals, &c.

ASTLEY COOPER (LIMITED).—Capital 10,000*l.*, in 5*l.* shares. Objects: To acquire and carry on the business of an analytical, consulting, manufacturing, and photographic chemist, now carried on at the Oatlands Chemical-works, Leeds, as "Astley Cooper & Co.," and to adopt an agreement with Astley Cooper. The first directors are Astley Cooper, Kate Cooper, and Walter E. Denham.

BELFAST BOTTLE EXCHANGE (LIMITED).—Registered in Dublin, as a company limited by guarantee, to raise a fund by entrance-fees, donations, fines, levies, &c., to protect the bottles and boxes of members, and to organise and carry into effect a system of collection, sorting, and storage, and to restore to members lost, stolen, or misappropriated bottles and boxes or other property. Entrance fee, 10*l.* for Belfast members and 5*l.* for members outside Belfast. Registered office, 43A High Street, Belfast.

CHROMIUM SYNDICATE (LIMITED).—Capital 15,000*l.*, in 1*l.* shares. Objects: To acquire the provisional patent No. 20,681, of September 30, 1898, applied for by Ralph W. E. MacIvor and Thomas F. Spencer, for "improvements in the manufacture of sesquioxide of chromium direct from chrome ore," and to carry on the business of manufacturing chemists, reducers of ores containing chromium, and manufacturers of pigments, mordants, and other dyeing and bleaching materials. Among the subscribers are R. W. Emerson MacIvor, 94 Lancaster Street, S.E., professor of chemistry, and Thomas F. Spencer, 23 Melbourne Grove, East Dulwich, S.E., engineer.



**WARHURST'S (LIMITED).**—Capital 5,000*l.*, in 1*l.* shares. Objects: To adopt an agreement, dated January 6, with William H. Warhurst, and to carry on the business of chemists, druggists, opticians and chemical manufacturers. The first subscribers are:—J. Girvan, 289 Scotland Road, Liverpool, chemist; T. H. Swinton, 16 Irlam Road, Bootle, chemist; E. A. A. Smith, 16 Fazakerley Road, Liverpool, chemist; T. F. Luya, The Nest, Bootle, merchant; J. Marsh, 15 Pembroke Road, Bootle, bookkeeper; S. Jackson, 44 Arundel Avenue, Liverpool, actuary; A. H. Davies, 19 Bentley Road, Liverpool, clerk. Registered without articles of association. Registered office, 180 Rice Lane, Walton, Liverpool.

**INCHBROOK AND PANDERMA BORAX COMPANY (LIMITED).**—Capital 300,000*l.*, in 1*l.* shares (150,000 preference). Objects: To adopt an agreement with Herbert E. Massey to manufacture, sell, and deal in boracite, borax, boracic acid, boris acid, boron, &c., and to carry on the business of miners, refiners, merchants, storekeepers, metallurgists, farmers, distillers, chemists, druggists, dyers, &c. The first subscribers are:—A. I. S. Godfrey, Junior Army and Navy Club, S.W., captain; L. E. Stayner, West Riding Regiment, Dover, lieutenant; C. Stanforth, St. James's Club, Piccadilly, gentleman; G. B. Massingberd-Mundy, South Ormsby, Lincs, gentleman; E. Richardson, 32 Lynton Road, N., clerk; W. B. Pipkin, 25 Thorngate Road, W., clerk; H. Hall, 5 Sussex Road, N., accountant.

**DEVONPORT CO-OPERATIVE DRUG COMPANY (LIMITED).**—Capital 500*l.*, in 1*l.* shares. Objects: To acquire the business carried on by L. K. Fowler, at 31 Albert Road, Devonport, and to carry on business as chemists, druggists, dentists, &c. The first subscribers (each with one share) are:—Chas. Croydon, J.P., 6 Fitzroy Terrace, Devonport; Mrs. Lilla W. Fowler, 8 Donegal Terrace, Devonport; Miss Elizabeth Cann, 21 Desborough Road, St. Indes, Plymouth; Louis K. Fowler, 8 Donegal Terrace, Devonport, dentist; John Rimmer, 78 Albert Road, Moricetown, Devonport, dentist's assistant; James T. Rimmer, 17 Victoria Place, Stoke, Devonport, chemist; and Mrs. Julia E. Livesey, 17 Victoria Place, Stoke Devonport. Table A mainly applies.

**PATENT - MEDICINES DEVELOPMENT SYNDICATE (LIMITED).**—Capital 5,000*l.*, in 1*l.* shares. Objects: To carry on the business of patent-medicine manufacturers and vendors, surgical-instrument makers, dealers in proprietary articles, &c. The first subscribers (each with one share) are:—H. Grainger, 44 Westbury Road, Ilford, gentleman; C. J. Lundman, 77 Grove Road, Bow, E., clerk; W. H. Dalgleish, 103 Adelaide Road, South Hampstead, secretary; D. Powles, 124 Wood Vale, Honor Oak, S.E., gentleman; E. A. Wells, 75 Glengarry Road, East Dulwich, S.E., gentleman; C. J. M. Balfre, 14 Edgarley Terrace, Fulham, draper; and C. A. Shoobridge, Birkbeck Place, West Norwood, clerk. The first directors (to number not fewer than three nor more than seven) are to be nominated by the subscribers. Qualification, 250*l.*

**BORAX CONSOLIDATED (LIMITED).**—Capital 1,400,000*l.*, in 10*l.* shares (80,000 5½-per-cent. cumulative preference). Objects:—To acquire, own, and work borate and colemanite deposits, boracite mines, lands, factories, &c., in the United States, England, France, Austria, Turkey, and South America, and in particular to acquire (1) the business of the Pacific Borax and Redwood's Chemical Works (Limited); (2) the business of the Borax Company (Limited); (3) the business of the Société Lyonnaise des Mines et Usines de Borax, of Lyons and Marseilles; and (4) the share capital of Mear and Green: to enter into an agreement with Lafayette Hoyt de Friese, and to carry on the business of miners, refiners, distillers, and manufacturers of and dealers in borax and boracic acid, chemical manufacturers, chemists, druggists, dyers, oil-and-colour men, &c. The first subscribers (each with one preference share) are:—A. Wilson, 2 Dartmouth Grove, Blackheath, Kent; F. M. Smith, 101 Sansome Street, San Francisco, merchant; J. Mason Williams, 17 Gresham House, E.C., gentleman; R. C. Baker, 13 Bankside, Southwark, chemical manufacturer; H. A. Adkin, 48 Queen Victoria Street, E.C., solicitor; H. Evan Thomas, 14 Billiter Street, E.C., barrister; and W. L. Plaskitt, 17 Throgmorton Avenue, E.C., gentleman. The number of directors is not to be fewer than four nor more than ten. The subscribers are

to nominate the first. Qualification, 500*l.* Remuneration, 500*l.* for the Chairman, 400*l.* for the Deputy-chairman, and 300*l.* per annum for each of the other directors.

**PARKE'S DRUG STORES (LIMITED)** have declared an interim dividend of 6 per cent. per annum on their preference shares.

**AKTIENGESELLSCHAFT FÜR CHEMISCHE INDUSTRIE, MANNHEIM.**—The Directors intimate a dividend of 7 per cent., which is the same as in the past two years.

**EASTMAN PHOTOGRAPHIC COMPANY (LIMITED).**—Dividend warrants have been posted for 10 per cent. on both the ordinary and preference shares, making, with the interim dividend already paid, a total dividend at the rate of 20 per cent. per annum for the year ending December 31, 1898.

## Trade-Marks Applied for.

*Anyone who objects to the registration of a trade-mark must address the Comptroller-General, Patent Office, Chancery Lane, W.C., within a month of the date of publication.*

(From the "Trade Marks Journal," January 4, 1899.)

Device and copy-written signature (the essential particulars), being parts of a label; for a remedy for animals. By C. Dauneau, Angers, manufacturer. 216,930.

Device of a ram suspended by a belt and surrounded by an ornamental design, and wording, "Goldenes Ollies"; for chemical substances for use in medicine and pharmacy, and for perfumery and toilet articles. By the Woll-Wäscherei und Kümmerei, Döhren, near Hanover, wool washers and combers. 214,776 and 214,775.

Device (the essential particular); for an eye-lotion. By Axel Larsen, South Belgravia, S.W., civil engineer. 216,847.

"CELESTINE"; for an ointment. By Margaret Elizabeth Morrison, Bexhill-on-Sea, widow. 218,123.

"CHLORIS"; for preparations for the hair, skin, and teeth—perfume and perfumed soap. By J. Wood, Edinburgh, hairdresser and perfumer. 218,501.

"ERIMUS"; for perfumery and toilet-articles. By E. Cook & Co. (Limited), 10 Mark Lane, E.C., soap-manufacturers. 218,683.

(From the "Trade Marks Journal," January 11, 1899.)

"NEROGEN"; for chemical preparations. By the Actien-Gesellschaft für Anilin Fabrikation, Berlin, manufacturers. 218,920.

Combination of devices (the essential particular), and wording; for chemical substances for use in manufactures, &c. By C. W. Waters (Limited), Great Eastern Street, E.C., manufacturers. 217,764.

"EPISYURE"; for a proprietary medicine. By J. R. Eyre, Dublin, advertising-agent. 214,293.

"GYROL"; for a medicated article (*crayon revulsif*) for the treatment of laryngitis, hoarseness, &c. By G. P. D. Coirre, Paris, chemist. 217,743.

"NIRVANINE"; for chemical substances for use in medicine and pharmacy. By Die Farbwerke vorm. Meister, Lucius & Brüning, Höchst-on-Main, manufacturers. 218,308.

Sketch-device (the essential particular), and wording; for a medicine. By A. Glasner, Commercial Road, E., dealer in clothes. 218,538.

"STELO"; for india-rubber syringes. By A. B. Cruickshank, Chancery Lane, W.C., mine-proprietor. 218,540.

Design of two labels; for a meat-juice. By Valentine's Meat-juice Company, Richmond, Virginia, U.S.A., manufacturers of meat-juice and its compounds. 215,890.

Label consisting of a combination of devices (the essential particular); for a natural mineral water. By H. Rucker & Sons, Poland, Maine, U.S.A., mineral-spring proprietors. 210,876.

Device (the essential particular) of a crescent, and wording "CRESCO"; for a preparation for the hair. By Annie Jackson, Greycoat Gardens, Westminster, hair-wash manufacturer. 217,612.

Device (the essential particular) of a marigold and wording; for perfumery and toilet-articles. By the United Alkali Company (Limited), Liverpool and Runcorn, soap-manufacturers. 217,395.



## Trade Notes.

MESSRS. EVANS, GRAY & HOOD, of 35 St. Mary-at-Hill, have adopted "Solazzi" as their telegraphic address.

MESSRS. TREBLE & SON, of Rhodes Street, Holloway, tell us that the note in our last number, intimating that they would send a copy of an etching to chemists who would care to have one, brought them such a flood of applications that they were run out of their provision the first day. They are having more done, and will catch up the demand before long.

THE Russian Customs Department have notified that "Sanitas Hygienic Embrocation" may now be freely imported into Russia, on condition that its wrappers and phials bear no medical recommendation. While on this subject we may mention that the Sanitas Company tell us that they have big stocks of B.P., and other eucalyptus oils, of which they are willing to send samples to inquirers.

NEW CATALOGUE.—We have received from the Thornton Pickard Manufacturing Company (Limited), Altrincham, a copy of their 1899 catalogue. There are several novelties contained in it, among them being a "time-exposure valve" for the Thornton-Pickard shutter, by which exposures can be automatically timed. The "Ruby" cameras are now obtainable in  $\frac{1}{4}$ -plate and 5 by 4 size. A luggage-carrier, for carrying the camera over the back wheel of a bicycle, is new, as also the "Ruby" convertible lens. This lens is of Jena glass, and can be used either as a R. R. or a W. A. lens, according to the stop used.

MR. WILLIAM HAY, of Hull, has produced a 48-page pamphlet in which he gives portraits and short bright biographies of twenty "bygone celebrities." These are sufficiently various; they include Oliver Cromwell and William Wilberforce, Judge Jeffries and John Wesley, Martin Luther and Marat, the Buonapartes and her Majesty the Queen in her bridal dress. Some of the portraits are from rare originals, and they are all thoroughly well produced. Mr. Hay's object is stated to be to present the booklet to purchasers of his unrivalled foods Invalids' Frumentine and Infants' Food, but these are only mentioned on one page.

THE EVANS FIRMS—viz., Messrs. Evans, Sons & Co, Liverpool, and Messrs. Evans, Lescher & Webb, Bartholomew Close, E.C.—have produced a book of illustrations dealing with shop-fittings, which is a brilliant example of the thoroughness with which the shop-fitting art is carried on nowadays. The book begins with a brief address, and is followed by a picture of the cabinet-making premises in Liverpool, shipping and timber views, four interiors of the workshops, and about a score of pictures of shop-fronts, pharmacy interiors, &c., each typical and suggestive to those about to fit. Then follow detailed descriptions, with illustrations, of showcases, dispensing-counters, sponge-cases, shelving, window-fixtures, lamps, labels, pots, bottles, &c.—everything needed to clothe medicinal remedies and druggists' sundries while they are in the chemist's possession, and to exhibit them to the best advantage for sale. There are good ideas in the book, and it is handsomely produced.

NEW COVERED POTS.—The flat-covered pots used for dispensing ointments and for other purposes, have done duty with scarcely any alteration in form, for many years, and, have often been reviled for the ease with which the lids got broken, thus rendering an otherwise good pot useless. It is on this account that chemists will welcome a new form of pot for ointments and pomades which Southall Brothers & Barclay (Limited), Birmingham, are introducing to the trade. The pots are upright in form, similar to those generally used on the Continent, and are covered with a neat celluloid cover. The cover, which can be had either white or imitation tortoiseshell, is strengthened by means of a lining of white polished metal, which, being turned back at the rim, has the effect of causing the cap to clip very closely in a groove in the jar. The clipping effect, however, does not interfere with the easy removal of the cap. The pots are lighter in weight than the old covered pots, and have altogether a neater appearance. Labels would be attached to the pots in these cases, not to the lids, an obvious advantage.

## Festivities.

### A SUPPER AT ARBROATH.

The Chemists' Assistants' Association had a supper in the White Hart Hotel, Arbroath, last week. Mr. F. Bennet presided, and four local doctors and three chemists in business in the town were among the company. Mr. Naysmith, chemist, proposed the Association, Dr. Gilruth replied for the medical profession, and Mr. Jack was sponsor for the Pharmaceutical Society.

### PHARMACY BALL AT STONEHOUSE.

Under the auspices of the Plymouth, Devonport, and Stonehouse District Pharmacy Society, a ball was held at the Town Hall, Stonehouse, last Friday evening, January 14. There were over 200 present. The committee who arranged the ball were Messrs. C. J. Park (President), G. Breeze, J.P., J. Cocks, E. W. H. Green, J. W. B. Swainson, J. D. Turney, C. T. Weary, and W. H. Woods. Mr. F. Maitland admirably carried out the duties of Hon. Secretary.

### MERRY MEN AT MANCHESTER.

The pharmacy students of the Owens College, Manchester, and the members of the teaching-staff connected with the pharmaceutical department of the College, held a social gathering at the Alexandra Hotel, Moss Side, on January 12. After an excellent dinner a varied programme of songs, recitations, banjo and violin solos was gone through, with speeches intervening. The "Department and Staff," proposed by Mr. W. B. Walmsley in an appreciative speech, was responded to by the Chairman (Mr. J. Grier) and Mr. O. V. Darbyshire, Ph.D. The "Pharmaceutical Society" was given by Mr. W. Botham, and the "Visitors" by the Chairman, Mr. J. H. Hoseason replied to both. Mr. W. Kirkby was unavoidably absent in consequence of illness at home.

### THE CHEMISTS' BALL.

The annual "Chemists' Ball" took place on the well-worn floor of the Portman Rooms, on Wednesday evening last, when upwards of 250 celibates and others met to celebrate the occasion. Some of the veterans present alleged that they observed a certain degree of terpsichorean indolence in the revelry, but the ground for these reproaches disappeared in the course of the evening, notably after supper. At the supper, after commenting on the success of the institution and discussing the knotty question of the terminal year of the century, Mr. Hills twitted the Hon. Secretary (Mr. Warren) with his persistent celibacy. Mr. Warren made a sparkling little speech in reply. The dancing was maintained with great vigour until a rather late early hour. Mr. J. W. Bowen performed the duties of M.C.

## Trade Tabs.

KAURI GUM to the value of 398,100*l.* (6,641 tons) was exported from New Zealand in 1897, as compared with 431,323*l.* (7,126 tons) in 1896.

A BRITON chemist has an entire window filled with a new brand of perfume, and on it a label that reads:—"Try a bottle and you will be on the right scent."

CARBIDE OF CALCIUM is now allowed to enter Norway duty free, on the ground that that country is about to produce and export large quantities of the article.

LIME JUICE to the value of 24,514*l.* was exported in 1897 from the various presidencies composing the colony of the Leeward Islands, as compared with 19,240*l.* in 1896.

DROPS FOR EARACHE.—Solution of atropine is recommended as an excellent remedy for earache. A drop or two of a solution of the B.P. strength will be sufficient.

GLUCOSE-FACTORY CLOSED.—The immense plant of the Glucose Sugar-refining Company, of Marshalltown, Iowa, employing 500 hands, has been closed down for an indefinite time owing to litigation.



## Recent Chemistry.

### Caffeine from Kola-nuts.

L. Bernegau has succeeded in subliming pure caffeine from kola-nuts by carefully heating the freshly-sliced drug. This shows that caffeine exists in the drug in the free state. Bernegau considers Keller's assay process the best (*Ber. Deut. Ph. Gesell.*, 1898).

### Strophanthin from Alpine Rose.

Dubigadoux and Durien have examined the milky juice which exudes from incisions made in the branches of the Algerian Alpine rose, and have isolated from it a bitter principle which by chemical and physiological tests they proved to be strophanthin.

### Hyosine in Datura.

DR. O. HESSE has examined the flowers of *Datura alba*, which is much cultivated as an ornamental plant in Southern Germany (*Annalen*, 303, 149), and finds that they yield a considerable quantity of hyosine identical with the alkaloid obtained from henbane, and having the formula  $C_{17}H_{21}NO_4$ . It is amorphous, readily soluble in water, and is not altered by treatment with potassium carbonate. He has failed to convert the alkaloid into atropine by treatment with silver oxide or sodium hydroxide.

### Digitalis Fermentation.

Kasman has isolated from digitalis-leaves a nitrogenous substance which is said to have the effect of a diastase, but which has an oxidising effect on organic substances similar to that of iron in the presence of water and air. The so-called diastasic effect he considers to be due to experimental error—probably admission of micro-organisms. The nitrogenous substance colours tincture of guaiacum blue, liberates iodine from potassium iodide in presence of starch, and turns pyrogallol, hydroquinone, and similar solutions brown. He has also found a similar substance in the stalks, leaves, and green berries of *dulcamara*.

### Active Principle of the Thyroid.

Blum has recently replied to Roos's criticism of his work on the thyroid gland (*Chem. Ztg.*, December 31, 1898), and maintains the truth of his assertion that iodothyryl does not pre-exist in the gland, and can only be obtained from it by an elaborate chemical process, in such varying quantities as to support the conclusion that it is a product of decomposition. Blum's own view of the active principle of the gland is that it is an iodo-albumose, which is toxic to the healthy organism, its function being to free the system from certain continuously-forming toxic substances by removing them from the circulation, the iodine which it contains playing an important part in this neutralisation.

### Salicylates of Bismuth.

M. Thabuis, as the result of an investigation reported in the *Journ. de Phar. et de Chem.*, states that commercial salicylates of bismuth are variable in their composition. They are decomposed, not only by water, alcohol, glycerin, &c., but also by alkalis in the cold and carbonate of magnesia; therefore they are not salts properly so-called, but molecular combinations of bismuth oxide and salicylic acid. The fact that the salicylic acid is washed out of the salicylates in proportion to the solubility of the acid in the solvent employed supports this contention. As a result of this property, some manufacturers put on the market mere mixtures of subnitrate of bismuth and salicylic acid. The rest of the paper is devoted to therapeutical considerations, which show that the author strongly objects to bismuth salicylate because it produces the physiological effect of salicylic acid—(the purpose for which it was introduced—ED.).

### A New Bismuth Reaction.

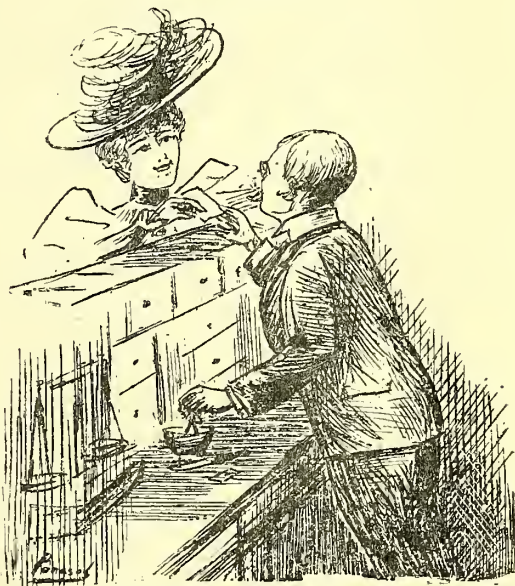
A writer in the *Pharm. Post* mentions that in examining a new bismuth preparation he observed that it coloured flame green; also that if bismuth or a bismuth compound is brought into contact for a time with bromine-vapour and then exposed to the outward part of a bunsen flame a distinct green colouring, very similar to that of copper, boron,

and thallium, is visible. Instead of bromine, strong hydrochloric acid may be used. The substance to be examined is touched with the fuming acid and then brought to a flame. Only the oxychloride of bismuth gives the colouration, and the salt is reduced to that yellow oxide. One difference between the green colour of the bismuth flame and that of copper is that if the bismuth chloride is brought into contact with the lower part of the bunsen flame that part appears pure green, the upper part blue-green, and the extreme point of the flame bluish-white. This is ascribed to the gradual oxidation of the bismuth chloride.

## La Recette Pour Père.

WHEN the pestle's soulful clang  
Sounds dull on listening ears,  
And the young *pharmacien*  
Feels bored to the verge of tears,  
The winsome maid,  
Demure and staid,  
With rose-cheeks rare,  
And eosine hair,  
Appears.

Before, all life looked dark,  
And work seemed all in vain;  
Years stretched out stiff and stark,  
And books proved quite inane;  
But the bright swift glance  
Sheds a weird romance  
O'er the dull receipt  
For pa's poor feet,  
In pain.



The lotion mixed with care  
Takes a time unduly long,  
And the wrath of a gouty *père*  
Is forgot in the heart's sweet song;  
But the fold precise,  
Watched by those bright eyes,  
Needs one brave and bold,  
And the wax won't hold,  
*Vraiment!*

At length, with a lingering sigh,  
The bottle handed o'er,  
The maid, with a wistful eye  
Thrown backward at the door,  
Glides into the night,  
And the gladsome sight  
Is gone; but still,  
Three days—re-fill,  
Once more!!!

[The illustration is from *Hazwells*.]



## Correspondence,

*In writing letters for publication correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters, with or without a nom-de-plume, must be authenticated by the name and address of the writer.*

### Notice to Correspondents.

*Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.*

### Dispensing in Surgeries.

SIR,—The lamentable dispensing-mistake made by a dispenser in a doctor's surgery near Stockport again brings home the importance of dealing with the subject of the dispensing of poisons by unqualified persons. The accident referred to was that in which a doctor's dispenser put 50 gr. of morphia in an 8-oz. mixture and directed two table-spoonfuls to be taken. If dispensing of poison by unqualified men constitutes a danger—and the existence of the Pharmacy Act proves that our legislators are of this opinion—accidents of the kind, more or less serious, must, by the very nature of things, be expected. That so typical a case should come before the public notice is, however, remarkable, and it behoves chemists to see that the circumstances receive the fullest attention by the proper authorities, with a view to an inquiry as to the efficacy of the present poison-laws, and, if necessary, such an amendment of them as would ensure that, whether poisons are dispensed in doctors' surgeries or chemists' shops, they would be dispensed under the direct supervision of a qualified man. I enclose copy of a letter which I have addressed to the Privy Council, which speaks for itself. The meeting of the Pharmaceutical Council referred to in the report (B) was the meeting at which the following resolution sent by the Chemists' Assistants' Union was considered:—

That the attention of the Pharmaceutical Society be respectfully drawn to the practice of dispensing poisons by unqualified persons in doctors' surgeries, and that they be urged to take every possible step to minimise the evil.

During the discussion several prominent members of the Council stated that they did not understand the resolution. If it referred to open surgeries, the Pharmaceutical Council, they stated, were doing all that was possible. If it did not refer to open surgeries, Mr. Carteighe explained that those who drew up the resolution ought to have known that the Council had no power to deal with the matter. In the face of the treatment this resolution received, I felt it would be wasting valuable time to communicate with the Pharmaceutical Society before writing to the Privy Council. The matter is an exceedingly grave one, and I think the time is quite ripe for concerted action in the matter by chemists generally. We are told that the Government will certainly deal with the poisons-question at an early date. The occasion is therefore a particularly opportune one. Should not letters be sent by every chemist to the Privy Council and the Pharmaceutical Society urging the immediate remedying of this evil? I am, yours, &c.,

Aveley, Essex, January 18.

W. S. GLYN-JONES.

[Copy.]

Aveley, Essex,  
January 17, 1899.

To the Clerk of the Privy Council.

SIR,—Though the Poisonous Substances Bill, 1898, was withdrawn, it is understood that the Government intend dealing with the laws affecting the sale and distribution of poisons. I respectfully suggest that the existing conditions under which poisons are dispensed in this country require immediate and serious attention. The Pharmacy Act of 1868 requires that those who keep open shop for the sale and dispensing of poisons shall be legally qualified; indeed, it insists upon the qualification of the actual seller of a scheduled poison. It would appear, however, that the law requires no qualification of any kind for the thousands of persons engaged in dispensing poisons in doctors' surgeries

and dispensaries, unless the surgery or dispensary is kept as an open shop. It is comparatively the few and well-to-do who are attended by doctors who write prescriptions but do not dispense their own medicines. In these cases the prescription is taken to a chemist to be dispensed, and the Pharmacy Act protects the patient by requiring that, when scheduled poisons are included, the dispensing must be done under the direct supervision of a qualified chemist. Still further protection will be afforded those whose medicines are made up at chemists' shops by the regulations passed at the recent meeting of the Pharmaceutical Society, which have been submitted to the Privy Council for approval. These regulations will afford no protection whatever to those whose medicines are dispensed in doctors' surgeries. At least three-quarters of the medicines taken in this country are dispensed in doctors' dispensaries without any legal restriction as to the qualification of the dispenser, or regulation as to the mode of dispensing. The danger to the public is exceedingly great, and is clearly shown by the enclosed report (A) of an inquest held at Heaton Norris on January 9. The reported evidence makes it apparent that the accident was as much attributable to the ignorance as to the carelessness of the dispenser. It may be argued that an isolated case does not prove that such occurrences are common, but the facilities possessed by a doctor afford such a strong temptation to prevent an inquiry by giving a certificate of death that it is a wonder that any case should be made public. The numerous advertisements in the *Lancet* and *British Medical Journal* in which doctors stipulate that they require unqualified men to dispense for them shows that the practice is very general. It is an anomaly that the law should hedge round with proper restrictions the selling of a pennyworth of oxalic acid, and yet permit the dispensing of the most poisonous and dangerous medicines by unqualified and utterly incompetent persons. The enclosed report (B) of the meeting of the Council of the Pharmaceutical Society, held in November last, shows that that body has had its attention drawn to the subject. It appears from this report that the Pharmacy Acts afford no remedy for this state of things. If this be so, I respectfully suggest that in the interests of the public safety the poison-laws urgently need amendment. If it would not be expedient to prevent (as on the Continent) doctors dispensing their own prescriptions, it should be easy to enact that the assistants employed by doctors to dispense should be either legally-qualified chemists or doctors.

I am, Sir, yours obediently,

W. S. GLYN-JONES,  
Member of the Pharmaceutical Society.

### Calamine.

SIR,—May I trespass on your valuable space to point out an inaccuracy in the report which you kindly gave in last week's issue of one of the papers read by me at the evening meeting of the Pharmaceutical Society of Ireland on January 9? I am reported as having said that calamine is impure oxide of zinc, contrary to what is stated in Squire and Martindale. What I did say was that calamine is, according to Squire and Martindale, impure oxide of zinc—not, as is frequently taught, impure carbonate of zinc; that the latter title was given it by Attfield; and that I assumed the conflict of opinion might be reconciled by the fact of it containing both carbonate and oxide. However, taking the analogous case of calcined magnesia, I rather inclined to Squire and Martindale's definition of it as impure oxide of zinc. I would not thus trouble you with this matter, which is not of very much importance, but I do not wish to pose for a moment as a critic of these three giants of our profession, but rather as a student of them.

Yours very truly,

30 Westmoreland Street, Dublin, JAMES A. WALSH.  
January 16.

### B.P. Chemical-formulæ.

SIR,—My sole purpose in writing on the above subject was to express the belief that the authorities responsible for the new B.P. had wisely selected rational and constitutional formulæ, instead of empirical, mainly. Modern chemistry is



becoming more accurate in determining the molecules of compounds, and by exact symbolic notation seeks to show their true constitution. Not long ago Dr. Gladstone asserted that chemists now knew the arrangement of atoms in the molecule of even exceedingly complex organic substances much better than comparatively simple inorganic bodies. Whether this be so or not, empirical formulæ are doomed; and no chemist, it seems to me, can doubt the advisability of the improved methods.

The effect on my mind when reading the paper under review was that the writer wished to adversely criticise the new B.P. method of writing chemical formulæ, he using such words as "probably the most unsatisfactory of the whole two hundred," and particularly drawing attention to what he considered "defects, inconsistencies, and anomalies." Amongst the examples of "needlessly diversified formulæ" the writer gave nine in number of very diversified compounds—oxalates, a borate, hydroxide, nitrate, benzoate, &c.—all of which may be found in any good modern chemistry-manual, and I felt prone to ask, "Is this not splitting hairs? What was radically wrong?" Regarding the true constitutional formula for potassium permanganate, I must assert the suggested "train of reasoning" will not fit. This is how I look upon the matter. The action of sulphuric acid on a permanganate leads to the formation of permanganic anhydride,  $Mn_2O_7$ , which on being dissolved in water yields a crimson solution containing the unstable permanganic acid,  $H_2Mn_2O_8$  (dibasic), and the substitution of  $K_2$  for the  $H_2$  of the acid gives the equivalent salt. Accordingly, following an "analogous train of reasoning" in the case of nitre, knowing the molecular weight of nitric acid to be 62.88, therefore  $HNO_3$  is its formula (a monobasic acid), and accordingly nitre is  $KNO_3$ . It is worth noting that the new B.P. gives  $As_2O_5$  for white arsenic. This is the result of Dr. Thorpe's determination of the gaseous density of arsenious anhydride, as the new B.P. more accurately designates the substance, while retaining arsenious acid as a chief synonym. Shortly after the correct formula was announced from the Royal College of Science, London, a former assistant of mine was attending a well-known school of pharmacy, preparatory to undergoing the Minor examination, when the question of arsenical compounds arose, and our young friend aired his knowledge. Later a conversation between teacher and student arose. "I say, W—, who told you white arsenic is  $As_2O_5$ ?" His question being answered, he continued: "That's all stuff. Some folks are always upsetting things, confound them! Stick to the B.P., W—! —stick to the B.P.!" I shall be very much astonished if the chemistry-examiners do not in future insist upon a good knowledge of the newer method of writing chemical formulæ.

I am, yours faithfully,

J. BRAIK MASON.

Dundee, January 16.

#### Vitriol for Chilblains.

SIR,—I notice in this week's *C. & D.* a chilblain-liniment, given by Messrs. Lever, and containing sulphuric acid, glycerin, and water. A customer of mine has used this recipe for several years for unbroken chilblains. The first time she brought it I informed her she had made a mistake and meant sulphurous acid, which I gave her, but she returned it, saying that it was not strong enough, as what she had had before used to turn red and burn holes in her dress if spilled. Nothing would satisfy her but having it made with sulphuric acid, and for the last three winters I have so made it and cured her chilblains.

Yours faithfully,

January 16.

VINUM. (158/23.)

#### Druggists on the Irish Council.

SIR,—Referring to the report of the last Irish Pharmaceutical Council meeting, it would appear that some members are under the idea that our body have made a demand for better representation. Might I point out that such is not the case? While I explained to the members of the Council I had the pleasure of seeing that, according to our numbers, more seats might have been given to druggists, the numbers being about:—Members, 160, with 19 representatives; Associates, &c., 52, with 2 representatives, we only wanted to ascertain if the members of Council were disposed to

support the co-option or election, as opportunity afforded, of druggists to seats, if our members qualified as Associate druggists more largely. There is no reason why both sections should not work harmoniously for the good of all.

The matter has been discussed by our committee, and referred to the annual meeting for consideration on February 2.

I am very pleased to see that already one of our members—Mr. Spence—has been co-opted, and I am certain he will do credit to his supporters and those whom he represents.

Yours very truly,

W. J. RANKIN,

Hon. Secretary Chemists' and Druggists' Society, Ireland.  
January 16.

#### Who are the Cutters?

SIR,—What is the chemist's business coming to? We have long had to contend with a system very much like that of the "Presents" Tea Company—"you buy for sixpence a tin of our extra superfine tooth-powder, which is worth much more, and we make you a free present of a very valuable tooth-brush." These popular attractions, however, are altogether eclipsed by the brilliant opportunities afforded by the firm which issues the circular, a copy of which has come into my hands, and which I enclose for your inspection. What would good old-fashioned chemists think of a "Sale of Chemists' Sundry Articles, the first Chemists' Sale ever held in —"? Such is the announcement, but who are the people who thus outrage all the proprieties? You will see that they describe themselves as "the Cash Chemists," "still going ahead," "are again leading," &c. Is it some wicked drug company who is thus prostituting and abusing the sacred name of "chemist"? By no means. This circular is issued by a firm of chemists which boasts that all its members are fully qualified, which has numerous branch shops, and which warns the public against entrusting their prescriptions to drug companies. This is not all, for this firm ostentatiously support the P.A.T.A. (notwithstanding that they have been notorious cutters for many years), and their acting partner not only attended a meeting of that Association and posed as a champion of full prices, but he made a speech in which he declared, amidst the applause of his brethren, that a "kind of cheap-jackism" was creeping into the trade, and must be discountenanced. "A kind of cheap-jackism!" Pray note the page headed "Is there anything you want here?" (the very words of the cheap-jack), and observe that the price quoted for "Pure Carbonate Soda" (really bicarbonate) is 1d. per lb. Epsom salts are quoted at 1½d. per lb., cream of tartar 10½d., tartaric acid 1s. 2½d., "sulphur" 2½d., &c. There is also, of course, the inevitable box of tooth-powder with tooth-brush "given free," this time for 4½d., but then it is marked "special clearance." There are several gross of feeding-bottles "to clear" at 3d., and, as you will see, there are a vast number of startling, if somewhat doubtful, offers. It so happens that a drug company which is credited with the most extreme cutting carries on business in the same town as "leading chemists," but I find that the public could only obtain 1 lb. of "carbonate soda" from the company for 2½d., whereas the "leading chemists" would supply 2½ lbs. for the same money, their price for Epsom salts being about half of that charged by the drug company, whilst the prices of all the other drugs named are cut far below those of the cutting company. So much for "a kind of cheap-jackism!"

It would, perhaps, have been hardly worth while to call the attention of your readers to the proceedings of these pseudo-champions of the P.A.T.A., but for the bearing which the facts given above have upon the policy of the Council of the Pharmaceutical Society at the present juncture, inasmuch as it is perfectly clear that getting rid of drug companies does not mean getting rid of cutters. A great many local Associations and individual chemists are following the example of Mrs. Nickleby, and urging the Council to "do something." The question is: what can the Council do? That they can appropriate and spend all the guineas that chemists may send them is certain, that they will attempt to "do something" is uncertain, that they will succeed in doing anything of any real value to chemists is extremely doubtful. What would be gained by obtaining (if that be possible) an enactment that only qualified chemists should be directors of drug companies? Nay, more, what would be gained by completely smashing up all companies dealing in



chemists' articles whilst there are numerous chemists who are longing to step into their shoes? Such chemists would alone be the gainers, as this course would provide them with a free field for their operations, of which they would not be slow to avail themselves. I understand that nearly all the cutting now existing in the trade was commenced by duly qualified chemists, and it is impossible to obtain a law to prevent such chemists from carrying on their lawful business or to prohibit them from charging what prices they may think fit for their goods. There are still, and I suppose there always will be, "traitors in the camp," many of whom are restrained chiefly, if not wholly, by the superior competitive power of the drug companies and stores. Remove this restraint, and matters will be worse for ordinary chemists than they are at present. It may be thought that chemists would be hampered by want of capital, but again, no law could be obtained to prevent chemists from borrowing money or to deprive the lenders of such safeguards and control over their capital as they might think necessary and be able to devise. Probably, if drug companies and stores could be destroyed, half-a-dozen cutting chemists would spring up in the place of every one of them, and would compete one against another, each striving to cut out the others. Wholesale destruction of companies is, however, clearly impossible. The most that could even be attempted is to exclude scheduled poisons from their shops and to deprive them of the use of such titles as "chemist" and "druggist." Is the game worth the candle? The titles "drug company" or "drug-store" are now well known, are often adopted by chemists themselves, and I should say that most of the companies would feel very little objection to abandoning chemists' titles altogether. However that may be, I think that chemists, before parting with their guineas, will do well to carefully weigh the whole matter, to ascertain what the Council will attempt, to judge as to the likelihood of their succeeding, and to estimate the probable results of such successes as they are likely to obtain.

I am, Sir, yours truly,

COMMON SENSE. (150/59).

#### The Division of the Minor Exam.

SIR,—I think the Minor ought not to have been made harder without being divided, especially as men who calculated themselves to do the old syllabus were pounced upon by the new, and would not have entered the trade.

These unqualified men must live and are opening as companies, and would pass if it were divided, since it requires a memory above the average to do it all at once.

FAIRPLAY. (214/13.)

#### Cost of Living in the Transvaal.

SIR,—As there seems to be some difficulty on the part of your readers in obtaining reliable information as to cost of living in the Transvaal, and Johannesburg in particular, it will be of interest to inquirers to learn that respectable board and lodging is obtainable at 7*l.* to 8*l.* per month. Board alone is charged 5*l.* to 6*l.* 10*s.* per month.

A READER OF SOME YEARS. (148/27.)

December 19.

[This note from South Africa appears to be a reply to a letter in our issue of November 26, wherein a correspondent said that a chemist's assistant earning 16*l.* per month in the Transvaal "would just live, and that's all." The present correspondent is a gentleman of good position and long experience in South Africa.—ED. C. & D.]

#### Chemists and the Sale of Food and Drugs Act.

SIR,—Since the adoption of the Food and Drugs Act a vast amount of attention—too much, in fact—has been devoted by the energetic inspectors and analysts to "drugs," much to the discomfort of a sorely-tried and estimable body of men—I mean qualified chemists. In the majority of cases where summonses have been issued and fines imposed, very few of the defendants have been guilty of fraud. Convictions have generally been obtained on technicalities—e.g., spt. æther. nit., Gregory's powder, lime-water, lin. foet., tr. iodi—and now look out, chemists, for syr. tolu., and see it is properly made to contain the right amount of balsam, or you will hear of it. The case of two chemists fined for selling ol. eucalypti not answering

the requirements of the B.P., 1898, I think was very unjust. Squire, in his "Companion to the B.P." (1894), says ol. eucalypti refers to the oils as a class, and, being obtained from different species, some description is necessary. The oil that was in great repute, and was official in the 1885 B.P. was ol. eucalypti amygdalinæ. Squire further states E. amygd. was for many years the most esteemed variety.

If inspectors would look after the "food" a little more there might be less use for drugs. The object of this letter is to suggest that the trade should combine to form a defence society to protect well-meaning men who may be summoned on technicalities, and supply good counsel to defend them. I have seen nearly forty years of drug-life, and occupying, as I do, a responsible position in one of our largest drug-houses, I should be happy to take an initiative, if chemists are sensible enough to wake up.

Yours truly,

X. Y. Z. (153/40.)

#### The Anti-Stores Crusade.

SIR,—The time has certainly arrived for chemists to do all in their power to remedy the injustice that unqualified companies are permitted to do that which is illegal for individuals to do. To remedy this evil ought to be the object of the next Pharmacy Bill. The very existence of the individual chemist is threatened by these companies who call themselves chemists, and thus improperly impose on the public. If it is legal for unqualified companies to call themselves chemists, why not have cash-lawyers, doctors, dentists, &c., on the same lines?

A COUNTRY CHEMIST. (159/10.)

#### Stores and Poisons.

SIR,—As another example of 'store-trade in poisons I give you a case that came under my own observation, and not that of a friend.

A lady inquired at this store last week for a bottle of Easton's syrup, and when requested to sign for it at first refused, saying she had got it regularly at the shop of a well-known member of the Pharmaceutical Council, and was never asked to sign for it.

A little explanation of the law procured the signature, which can be produced to verify this if required.

If "Verax" would use his influence to keep the Council up to the mark in this respect first, then he might find fault with the stores. Why are stores to be the butt of those chemists who have fallen so far behind the times that they have nothing to do but sit down and grumble?

I am, &c.,

January 17.

STOBAX. (159/46.)

#### Rival Price-lists.

SIR,—It is highly amusing to us to find Messrs. A. & H. in your last issue claiming originality for their 1898 price-list, chiefly on the ground that it was published in "four sections," and "largely illustrated," while they think another firm which has adopted the same form might have benefited by a "little more originality."

Can either of these firms be ignorant of the fact that so long ago as 1888 we published our list in four sections, profusely illustrated, as theirs is now? Further, that every bottle in their lists, with one exception, has been illustrated in one or other of our lists. The same applies to all the packages and most of the labels. Own-name specialities and packed drugs for the chemist's counter have, in fact, been our leading lines during the past twenty years, and we now behold the edifying spectacle of those who for years condemned our system, rolling over each other in their eagerness to catch up to us. We wish them every success in the race, our long start ahead giving us the opportunity of enjoying the fun.

Yours faithfully,

London, January 16.

LORIMER & Co.

#### Legal Queries.

147/62. W. T.—Unregistered persons may sell calomel, but not preparations of belladonna.

150/50. G. S. J.—You will find under what conditions the Board of Inland Revenue allow chemists to sell pure spirit in the DIARY, page 214.



149/52. *Subscriber*.—The poisons-schedule is given in the DIARY. It includes neither syr. rhœados, calomel, nor salts of lemon, but it does cover belladonna-plasters.

149/25. *Dentos*.—To ascertain whether a word is registered as a trade-mark you must either pay 1s. for a personal search, or apply for registration of the word on a 5s. form. If it is already registered your application will fail, but your 5s. will not be returned. See also DIARY.

148/28. *Broadacre*.—No one can tell whether your label is to be an infringement of someone else's from your description. If, as you say, it is to be "an entirely different design," you are all right. But why are you in any doubt? What you must not do is either to use the other people's trade-mark (and to find out exactly what that is you must make a search at the Trade Marks Office, which will cost you 1s.), nor may you sell any article which might lead purchasers to think they were getting the rival thing.

155/5. *J. M. W.*—We do not see any particular grievance in chemists being required by this time to supply all preparations of the new B.P. standard. They knew a new Pharmacopœia was coming some months before it appeared. Of course, if you can alter your old preparations so that they will answer the new tests they will do. Or you can, we should think, use up your old stock in some proprietaries or in dispensing-mixtures, &c., from your own prescriptions.

155/56. *Telephone*.—If A and B have jointly signed an agreement with a telephone-company for a five-years' service, and B falls during that period, it is clear that A cannot require the company to continue the service to him alone on the payment of his half of the annual payment. Whether they can compel him to continue the contract alone depends on the terms of the agreement.

156/17. *Messenger*.—If your boy delivered the goods to the wrong person, surely the man who paid for them and has not yet got them has a just claim on you.

156/10. *Euphrasia* writes:—"Following your advice I have discarded the old 'lac sulphuris,' and now sell 'sulphur. precip.' when 'milk of sulphur' is asked for. I find, however, that customers complain that it cannot be made to mix with milk, as the old preparation did. Can you suggest a way out of the difficulty?"

[We do not think the difficulty is a great one; but you may sell the old milk of sulphur if you wish to, so long as you properly explain, either verbally or by label, that it is not the milk of sulphur now recognised.]

150/52. *Business* writes:—"Smith contracted debt (3l. 7s. 9d.) in September 1886, left England soon after, died in 1892 abroad, address unknown. A niece administered to the estate July 1898. Is she liable for the debt, and can I recover in court, as she says it is statute-barred?"

[The particulars are not sufficient to enable us to give an exact answer. The rule is that absence beyond seas does not count, but if Smith really died in 1892, and his death could be proved, that would be a bar to the action, but it is by no means certain. The matter can be easily decided by suing the administratrix and leaving her to prove the death and the statutory bar, which she will have some little difficulty in doing.]

157/74. *R. A. N.*—An unqualified person who in his own shop sells articles put up by a chemist, and bearing the chemist's label with the designation "chemist," is using the title, and is liable to a penalty. See a case reported in *C. & D.*, June 18, last year.

148/49. *Apprentice*.—In the absence of any stipulation in the apprenticeship deed, the parent cannot recover part of the premium on the cancellation of the indentures through illness of the apprentice. The case was decided in *Wincup v. Hughes*, 6 L.R., C.P. 78. In that case the master died a year after the apprentice had been bound, and the father sought to recover a proportion of the premium, but it was held that the action was not maintainable.

157/18. *C. B.* asks:—"Can apprentices claim any salary for the time they are absent during illness?" [They can, if they are entitled to salary.]

## Miscellaneous Inquiries.

We reply to subscribers and their employes only upon subjects of interest to other readers generally. When more than one query is sent write each on a separate piece of paper. When a sample accompanies a query full particulars regarding the origin and use of the sample must be given, and it must be distinctly labelled. Queries are not replied to by post, and those sent anonymously are disregarded.

136/68. *R. S. V. P.*—The sample which you send is *Costus-root* (*Saussurea Lappa*), the produce of a plant belonging to the Natural Order *Compositæ*. It is a native of Kashmir, and is found at an altitude of 8,000 to 12,000 feet. The root is exported in large quantities to China under the name of "Pachak," and is used by the Chinese as incense and also to preserve clothes from the attacks of moths and other insects. It is also extensively employed in India for similar purposes, and was formerly smoked as a stimulant, being stated to be narcotic when thus used. Carminative, stimulant, antiseptic, prophylactic, astringent, sedative, and insecticidal properties are ascribed to this root; it has a bitter and pungent taste, and an odour somewhat resembling orris-root. A transverse section reveals the presence of large balsam-ducts.

150/66. *C. G. D.*—The "floating-cloud" effect in household ammonia is managed by using hard soap 5 to 10 gr. to the pint of a mixture of 1 part of strong ammonia and 2 parts of distilled water.

156/68. *J. A. D.*—A coating of coal-tar asphalt will protect the oaken barrel from the action of solution of chlorinated soda stored therein. Chlorine chambers were formerly made of tarred wood or stone, but are now, in England at least, made of lead or cast-iron plates. If of iron, several coats of oil-paint are used to protect the iron from the chlorine.

155/41. *Herb*.—The Latin name of the herb "scull-cap," as sold by herbalists, is *Scutellaria minor*.

155/53. *Subscriber*.—Had you previously sent us the information about the powders which you now send, we might have analysed them. The samples have been destroyed.

146/57. *Hair-oil*.—We will try to get the information you require.

145/6. *Emulsion*.—Your formula for Cod-liver Oil Emulsion does not contain enough of the emulsifying-agents. For 70 oz. of emulsion, to contain 50 per cent. of oil, 3j. p. acaciæ and 3ss. p. tragac. at least will be necessary. 3ss. p. marant. is at the same time a useful addition, as it helps to break up the oil-globules.

151/25. *E. A. H.*—The sample of Riga Balsam is interesting. It is the brown variety about which a note and formula are given in "Pharmaceutical Formulas," page 446.

148/61. *Civet*.—As a rule a solution of oxalic acid will Remove Stains from brown boots, but it is liable at the same time to render the surrounding parts too light.

## Information Wanted.

The Editor will be obliged for replies to the following from any who can furnish the information.

157/64. Makers of "violet indexical silver soap."

15/26. "Mazella" toilet-paper: where obtainable?

130/7. What is "Rock Salmon"? Given in the Midlands as a cough-mixture for children, and resembling syr. scillæ.

160/17. Name and address of manufacturers of spongopilline.

251/19. Where can the small saucers or palettes, enclosed in packages of gold paint, be obtained?



## Trade Report.

### Notice to Retail Buyers.

*It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk, and, for crude drugs, without charges. For fuller particulars see the article "Lowest Trade Terms" in THE CHEMIST AND DRUGGIST, March 19, 1898, p. 473. O.f.f. quotations are for London unless when otherwise stated.*

*Buyers of essential oils are particularly requested to note that low quotations, especially for Sicilian essences, are rarely, if ever, accompanied by guarantee of genuineness.*

### 42 Cannon Street, London, E.C.: January 19.

THE drug-sales held to-day appear to have paralysed other business, for there is much complaint as to the slowness of trade. The most important feature of the week is the advance in citric acid. Manufacturers have been slow to acknowledge the shortage in the crop of juice, upon which a concise but trustworthy statement appeared in our report of January 7. Now they have difficulty in getting supplies, and the advances in the prices of juice and acid noted this week are likely to continue. The copper ring is hardening, and we appear not to have arrived at the highest limit for the sulphate. There is more inquiry for crude camphor, and quotations are running up. Quinine is dull, and quicksilver is unchanged at our last quotations, with good business reported. New cod-liver oil from the south Norwegian fisheries has been sold in London this week at current rates. We deal with the position of menthol in an editorial note. The following are the principal movements this week, except at the drug-auctions, which are summarised under that heading:—

Higher	Firmer	Lower
Acid, citric	Acid, Acetic	Anise (star)
Ammonia sulphate	Acid, tartaric	Cubebs
Cascara sagrada	Beeswax	Ipecacuanha
Chamomiles	Borax	(Cartag.)
Copper sulphate	Camphor	Morphine
Honey (Jamaica)	Galls	Phenazone
Oil, castor	Menthol	
Saffron		
Senna		

The goods offered in the drug-auctions to-day were varied and voluminous. Ergot was in exceptionally large supply, and the finest show of rhubarb seen in London for some years was exposed. There were twenty catalogues, and the work of inspection was exceptionally arduous. The sales are dealt with fully two pages further on, and changes in values there noted.

The more important items in the English arrivals up to Wednesday were Japanese camphor 30, castor-seed 4,200, oil 521, cinchona 53, colocynth 20, citrate of lime 20, menthol 20, citronella oil 183, eucalyptus oil 37, lemongrass oil 100, peppermint oil 9, opium 13, quillaia 567, quinine sulphate 56, rhubarb 53, senna 20, saffron 1, and beeswax 124. In Hamburg the heaviest arrival of the week is 390 packages of wax, all to order. Thirteen bales of E.I. senna, direct import, have arrived there.

### The Borax Conversion.

There is a good deal of talk in commercial circles regarding the new venture in borax, and it is generally considered to be a mere financial move which shows little likelihood of affecting prices, especially as simultaneously with the appearance of the Borax Consolidated's prospectus there came an announcement by a company with large and

rich deposits in Turkey that they can supply, as they have been supplying, a high-quality boracite. Doubtless, more of the same nature can be found, and there should be no lack of competition. A writer in the *Westminster Gazette* reckons that the vendor to Borax Consolidated (Limited) is making slightly over half a million by the deal. He gets 2 100,000*l.* for what he has paid about 1,564,900*l.* The writer makes the following estimate of the payments made by the vendor:—

(a) To the Pacific Borax Company, 244,000*l.* in cash or debentures; 270,000*l.* in 266,666*l.* preference shares and the balance in cash; 320,000*l.* in ordinary shares; total, 839,000*l.*

(b) To the Borax Company (Limited), 320,000*l.* in cash, debentures, or shares.

(c) To the French Company, 240,000*l.*—viz., 40,000*l.* in cash or debentures, 150,000*l.* in cash or preference shares, 50,000*l.* in ordinary shares.

(d) To the Chilean and Peruvian companies, about 129,000*l.* in cash.

In view of the disasters which have attended the work of many borax companies the venture is one of the boldest made in the chemical for many years.

### Heavy Chemicals.

[These prices are for market-centres other than London.]

A continuously increasing business is being transacted in heavy chemicals, greater inquiry being particularly noticeable on the Tyne market, and the demand in the Lancashire district is very steady, but on the Clyde the difference has not been so marked. The general tone of the market shows a considerable improvement. Prices are well maintained, and where any change has taken place the movement has been mostly an upward one.

ALKALI PRODUCE.—Caustic soda steady at unchanged rates. Bleaching powder is in much more active inquiry, and the late improvement in price is maintained. Saltcake now stands at 2*l.* 3*s.* 30*s.* per ton on rails in bulk. Ammonia alkali steady.

SULPHATE OF COPPER.—Very firm and dearer. Anchor 20*l.* 10*s.*, and Liverpool 19*l.* 15*s.* to 20*l.*

SULPHATE OF AMMONIA steady. Beekton, January to June, 10*l.* 5*s.*, Beekton terms, 10*l.* 6*s.* 3*d.* to 10*l.* 10*s.*; Hull, 10*l.* 8*s.* 9*d.* to 10*l.* 10*s.*; and Leith, 10*l.* 10*s.* to 10*l.* 12*s.* 6*d.* Exports from Leith last week amounted to 381 tons.

SOUTH DURHAM SALT.—Firm, and in good inquiry at 9*s.* 6*d.*, f.o.b. Tees.

LEAD COMPOUNDS.—Nitrate of lead, 20*l.* 10*s.* per ton. Sugar of lead, white and brown, 26*l.* and 17*l.* per ton respectively, and 1*l.* less 2½ per cent. Glasgow.

MAGNESIUM SALTS.—Carbonate, 37*s.* 6*d.* to 40*s.* per cwt.; calcined magnesite, 1*s.* to 1*s.* 4*d.* per lb.; chloride of magnesium, 2*l.* 10*s.*; and sulphate (Epsom salts), 2*l.* 12*s.* 6*d.* to 3*l.* per ton.

BARIUM COMPOUNDS keep moving steadily, and prices remain fairly firm. Chloride, best refined crystals, 6*l.* 15*s.*, free on rails, and 6*l.* 17*s.* 6*d.* f.o.b. Precipitated sulphate (blanc fixe), 6*l.* 10*s.* to 6*l.* 15*s.* Mineral sulphate, 62*s.* 6*d.* to 92*s.* 6*d.* according to percentage and quantity. Mineral carbonate prices are nominal, there being very little offering.

TIN CRYSTALS.—6*d.* to 6½*d.* per lb., and very firm.

ZINC SULPHATE.—Firm, at 6*l.* 15*s.* to 6*l.* 16*s.* 3*d.*; and chloride, 7*l.* 2*s.* 6*d.*

### Liverpool Drug-market.

Liverpool, January 18.

CASTOR OIL.—A large business has been done, both spot and forward, in good seconds Calcutta up to 3*d.*, and now 3½*d.* is asked. Considerable sales in French first-pressure have also been made, and it is firmly held at 2½*d.* to 3*d.*

TURPENTINE has slightly given way, and is now about 32*s.*

GUM ARABIC.—A small parcel of Soudan sorts has changed hands at 70*s.*

QUILLAIA is weaker owing to a large arrival, but holders are not disposed to look at less than 16*l.* 15*s.*

BEESWAX.—Fifteen barrels of Gambia are reported as sold at 6*l.* 7*s.* 6*d.*, and a parcel of good yellow Chilian has changed hands at 7*l.* 5*s.* Stocks are small and values are still hardening.

HONEY.—The demand continues good, and 60 barrels low-grade Peruvian are reported at 18*s.* per cwt., while pale liquid Californian in quantity is fetching 46*s.* per cwt. as it rises.

CANARY-SEED is still flat, with little or no trade passing. The value of boat-bought Turkish is 27*l.* 10*s.* to 28*l.* per qr.

POTASHES move off slowly at 25*s.* per cwt., and 34*s.* to 35*s.* for pearlshes.

FENUGREEK-SEEDS.—Firmly held at 8*l.* to 8*l.* 10*s.* per ton.

KOLA-NUTS are arriving slowly, and value remains at 2*d.* to 3*d.* per lb.

CAPRICUMS.—A fresh arrival of Niger, 205 bags, is held for 32*s.* 6*d.* to 35*s.* per cwt.



**Hamburg Market.***Hamburg, January 17.*

Our drug-market continues quiet.

AGAR-AGAR.—Spot delivery is firmer, at 320m. per 100 kilos.

ANISE, STAR.—Quiet. New arrivals have come in, and the spot price is reduced to 210m. per 100 kilos.

CAMPHOR, REFINED, is a little firmer. Spot is held in second hand at 290m.; forward, 287½m. per 100 kilos.

CONDURANGO-BARK.—70m. per 100 kilos. is now wanted.

CITRIC ACID has advanced to 250m. per 100 kilos.

CEVADILLA-SEED is unchanged, at 80m. per 100 kilos.

ERGOT OF RYE.—More offering from Russia at 230m. per 100 kilos.

GALANGAL.—Easier, at 42m. per 100 kilos.

NUX VOMICA is quoted 12½m. to 13m. per 100 kilos.

LYCOPODIUM is firmer, at 230m. per 100 kilos.

MENTHOL.—Quiet, at 16¼m. to 16½m. per kilo.

SPIRIT OF TURPENTINE.—Quieter. Spot, 65m. per 100 kilos.

OILS.—Little business in cod-liver. Castor is firmer and higher: first-pressing, spot, 53m.; January-June, 51m. per 100 kilos. Prices of essential oils have changed little since last week. Russian anise oil firm, at 13¼m. per kilo. Star-anise oil, 13½m. per kilo. Peppermint oil quiet; HGH, 5m. per lb. Japan ditto, 7¼m. per kilo. Carvol is firm, at 14¼m. per kilo.

**Cablegrams.**

HAMBURG, January 19, 11.35 A.M.:—The firm tone noted in my letter in regard to camphor and castor oil continues. The former is quoted 295m. per 100 kilos. by second-hand holders, or 5m. above the sublimers' price for balls. Castor oil is not quotably higher, but is much firmer. Condurango is dearer, 75m. per 100 kilos. being to-day's price. Pepper is advancing.

\* \* \* \*

NEW YORK, January 19, 3.33 P.M.:—Business has now fairly resumed its activity, and a confident feeling prevails, several articles being in a strong position. Opium and quinine are improving in demand, and prices tend firmer, but have not yet advanced. On the other hand, bromides have advanced by 2c. per lb., following the recent advance in Europe. Mexican sarsaparilla is offered at 8½c. per lb., but is dull at that. Pareira brava root is 9c. per lb., and somewhat easier in tone. Citric acid has advanced to 34c. per lb.

**London Markets.**

ACID, CITRIC.—Owing to the advance in concentrated lemon-juice to 15½. 15s. c. & f. terms, the market has advanced to 1s. 2½d. per lb., but makers are not willing sellers, and are refusing orders for forward delivery. The price quoted is merely nominal, and there is every indication of another advance of 1d. on an early day. There are no second-hand offers at the moment.

ACID, TARTARIC.—Firm, and in good demand. English crystal on the spot is 1s. 0½d. and foreign 1s. per lb. There was a reduction of 7m. per 100 kilos. on the Continent ten days ago, induced by "cutting," but this has had no effect on the market here, except that one or two foreign makers are open to meet prices. The note in our last report regarding a Vienna factory does not, of course, refer to the factory of Messrs. T. Medinger & Soehne, Vienna, who are not in the convention, and for whom Messrs. David Thom, Domeier & Co. (Limited) are agents in this country. Other agents for Vienna houses also intimate that they can supply at once.

ARSENIC.—Steady, with small sales at 17½. per ton on the spot for best white powder.

BORAX, firmer at 16s. to 16s. 6d. per cwt. for crystals, and 6d. more for powder.

CASCARA SAGRADA.—Dearer. America is still buying on this market, and one holder is reported to have cleared his stock of three to four year old bark at 28s. 6d. to 29s. per cwt. In one quarter 37s. 6d. per cwt., c.i.f., is quoted for ton lots of thin, four year old bark, and 34s. for 1898 crop.

CHAMOMILE-FLOWERS.—Fine qualities are unobtainable below 77s. to 80s. per cwt. Fair seconds are selling by the exporters at 64s. 6d.

COPPER SULPHATE.—Dearer, and a rising market, good brands being quoted on the spot at from 19½. 5s. to 20½. 10s. per ton on the spot.

CORROSIVE SUBLIMATE.—The price for cwt. quantities or less is 2s. 5d. per lb, not 2s. 4d. as in our last issue, which is the quotation for 5 to 10 cwt. lots.

DAMIANA-LEAVES.—Easier at 5d. per lb., c.i.f., or at 5½d. on the spot.

GALLS.—Market for Persian blue is very strong, and small sales have been made at 57s. 6d. to 60s. on the spot, but the quotation for forward delivery is above spot price, and there are no sellers in that position. It is thought that the goods on the way may sell at 65s. on arrival, Shanghai reports, dated December 12, state that stocks of Chinese galls are almost exhausted, and prices for plum-shaped remain high. The shipments during December amounted to 1,726 piculs. A sale of 300 cases Chinese to arrive was reported at the end of last week at 52s. to 52s. 6d. per cwt, c.i.f., being lower.

INSECT-FLOWERS.—From Trieste we learn that the stock of Dalmatian insect-flowers on December 31, 1898, was 217,100 kilos. The receipts during December were 7,700 kilos., and deliveries 18,700 kilos. The following are the current prices f.o.b. Trieste:—Open flowers, 57s. 6d. to 59s.; half-open, 63s. to 76s.; closed, 89s. to 93s.; and wild, 102s. to 110s. per cwt.

LOBELIA.—Loose herb in bags of 75 to 100 lbs. is offered at 3d. per lb. c.i.f., or at 3¼d. to 4d. spot; pressed in packages is 4½d. to 5½d. per lb. c.i.f.

MORPHINE HYDROCHLORIDE is easier, sales of powder having been made at 4s. 8d. per oz.

OIL, COD-LIVER.—Reports from the Norwegian fishing-grounds, south of Lofoten, are distinctly favourable, the catch so far is satisfactory, both in quantity and quality, and the oil received in Bergen is good. Sales have been made in London this week of this 1899 oil at 65s. per barrel c.i.f. The stocks of old oil, both 1897 and 1898, still held here are large, and holders are extremely desirous to realise on the basis of 65s. per barrel for 1898 oil. As to the new oil, it should be noted that the Lofoten fishing does not begin until next month, and rarely does any new Lofoten oil reach this country until the first week of March. The Southern oil now offered will not be delivered here for at least three weeks. The volume of business done so far is small.

BERGEN, January 14.—The market remains inactive, the downward tendency still apparent. Arrivals of new oil have appeared, and favourable reports have been received concerning prospects. 1898 Lofoten oil is unchanged at 60s. per barrel, f.o.b. terms, and it is likely that new oil will be offered at the same figure. The reports from Bergen up to date have been 118 barrels, against 314 barrels at the same date of 1898.

OIL, OLIVE.—Quotations of new crop other than those indicated last week, are:—Cream extra, 57½.; cream, 54½. 10s.; extra sublime, 51½. 10s.; sublime, 46½.; and super-fine, 42½. per ton c. and f.

OPIUM.—Quiet, with small sales of Persian at 10s. 6½. per lb.; fine is held for 11s. 3d. to 11s. 6d. A small business has also recently been done in Turkey druggists' at easier rates—viz., 9s. 6d. to 9s. 9d. per lb.

SMYRNA, January 7.—This week needy holders were obliged to lower their prices again, and at 8s. 7d. to 8s. 9d. per lb. the United States bought over 60 cases of manufacturing descriptions, and England and the Continent 15. The market is excited, as many buyers have come forward on behalf of consumers, and if speculators come forward prices are likely to advance 5 per cent. Weather, however, keeps very favourable for sowing, but it is premature to form an idea. A correspondent remarks:—"At the end of the year we did not foresee the panic which has seized bankers. Most speculators and holders deposit their stocks with the latter, obtaining from them an advance of 75-80 per cent. This season the advances were on an average of 8s. 3d.; with insurance, interest, expenses, &c., the margin has nearly been reached, and capitalists, who hold about 600 cases of opium, insist on payment or sale. The article must suffer in consequence of this forced fall."

SMYRNA, January 14.—Our buyers this week found great difficulty in securing 25 to 30 cases at 8s. 6d. to 8s. 8d. for manufacturing descriptions; and to-day, although our market stands nominally at above figures, still for good material we do not think anything below 8s. 9d. to 8s. 11d. would tempt our large, strong holders. All weak, needy dealers have practically for the moment cleared out, and some time must pass before pecuniary needs will make them come forward again. At present, therefore, our market is strong and well maintained, with every likelihood of a rise if present demand continues.



CONSTANTINOPLE, January 14.—The beginning of the week witnessed a sharp decline, owing mainly to a few weak holders being anxious to realise. The market has now, however, resumed its normal tone. To-day's prices are steady at the equivalent of 8s. 6d. per lb. f.o.b. for druggists' grades. Sales during the past week amount to 16 cases.

**SPICES.**—Cochia Ginger dull. At the auctions on Wednesday the small quantity offered was bought in. A parcel of good limed Japan was withdrawn, 20s. being wanted. Zanzibar Cloves rather easier on the news of large receipts. Good heady, but rather stalky, sold at 3½d. per lb.; March-May delivery at 3¼d. per lb. Chillies firm, but little sold; only a few cases of fair Japan, at 45s. per cwt. Pimento slow of sale. One or two lots sold, at 4½d. per lb. for ordinary. Nutmegs and Mace quiet and unchanged. Cassia lignea bought in, at 54s. per cwt. for old import, and at 49s. for new selected; broken partly sold at 33s. 6d. per cwt. Pepper again dearer. Singapore white sold at 8½d. per lb. for ordinary, at 8¾d. for good fair, and at 9½d. to 9¾d. for good white. For arrival, 8¾d. per lb. is the quotation for fair quality. No Penang offered, but privately business has been done at 7¾d. per lb., with sellers to arrive to 8d. per lb. Singapore black sells at 5½d. on the spot, and at 5½d. to 5½d. to arrive, according to position.

**VALERIAN.**—Thuringian crops show a considerable falling off this year; the present stock will, in consequence, probably not be sufficient for the year's consumption. The first yields were immediately disposed of, and higher prices have been paid in the district.

### London Drug-auctions.

TO-DAY'S sales were exceptionally heavy, none having been held since December 18, 1898. There were twenty catalogues, which included small lots of vanillas taken as they fell. The sales commenced at 10.30 A.M., and continued without interruption until 4.55 P.M., when by a heroic effort the catalogues were all cleared. The following is a concise record of the business done:—

Offered Sold		Offered Sold	
Aconite-root.....	19 ... 19	Dill-seed .....	110 ... 0
Albumen .....	14 ... 2	Dragon's-blood ..	35 ... 7
Almonds, bitter ..	7 ... 7	Elaterium .....	5 ... 5
Aloes (various)...	545 ... 174	Ergot of rye .....	104 ... 0
Ambergris.....	12 ... 2	Galangal .....	10 ... 0
Aniseed .....	115 ... 21	Galls .....	4 ... 0
Annatto-paste .....	3 ... 3	Gamboge .....	59 ... 0
Annatto-seed .....	90 ... 0	Gentian .....	223 ... 2
Antimony .....	50 ... 0	Guinea-grains .....	25 ... 0
Argol .....	44 ... 40	Gum ammoniacum ..	40 ... 8
Asafetida .....	176 ... 139	arabic... ..	49 ... 13
Asphaltum .....	50 ... 0	galbanum .....	63 ... 0
Balsam, Canada ..	6 ... 0	grass-tree .....	31 ... 0
Copaiba .....	8 ... 4	guaiaicum .....	6 ... 3
Tolu .....	10 ... 0	olibanum .....	24 ... 0
Belladonna-root ..	3 ... 0	sandarac .....	15 ... 0
Benzoin (various) 286 ... 155		tragacanth .....	14 ... 0
Birdlime .....	7 ... 7	Honey .....	101 ... 35
Buchu .....	22 ... 15	Ipecacuanha (Cart.)	37 ... 37
Cactus-flowers .....	4 ... 0	Ipecacuanha (Rio) ..	43 ... 35
Calumba .....	326 ... 234	Jalap .....	51 ... 32
Camphor (refined) ..	9 ... 0	Juniper-berries .....	40 ... 0
Canella alba .....	13 ... 10	Kamala .....	22 ... 0
Cannabis indica ...	121 ... 40	Kino .....	33 ... 0
Cantharides .....		Kola-nuts .....	46 ... 18
(Spanish) .....	2 ... 2	Lime-juice .....	22 ... 1
Cardamoms .....	473 ... 218	Liquorice-root .....	41 ... 0
Cascarilla .....	66 ... 21	Marking nuts .....	15 ... 0
Cashew-nuts .....	2 ... 0	Mastische .....	15 ... 0
Castor-seed .....	191 ... 0	Matico-leaves .....	9 ... 9
Castorium .....	4 ... 0	Menthol .....	23 ... 0
Chillies .....	10 ... 0	Musk .....	37 ... 3
Chiretta .....	4 ... 0	seeds .....	2 ... 0
Cinchona .....	242 ... 97	Myrrh .....	160 ... 48
Civet .....	2 ... 0	Nux vomica .....	30 ... 30
Coca-leaves .....	1 ... 0	Oil, ajowan .....	5 ... 0
Cocculus indicus... ..	64 ... 4	anise (star) .....	13 ... 0
Colocynth .....	53 ... 4	bay .....	6 ... 0
Croton-seed .....	81 ... 46	bergamot .....	1 ... 1
Cubebs .....	297 ... 59	cassia .....	11 ... 0
Cumin-seed .....	21 ... 0	castor .....	50 ... 0
Cuscuta .....	12 ... 0	cedarwood .....	1 ... 0
Cuttlefish-bone ...	20 ... 20	cinnamon .....	62 ... 0

Offered Sold		Offered Sold	
Oil, citronella .....	12 ... 0	Sandalwood-dust...	12 ... 0
cloves .....	11 ... 0	Sarsaparilla .....	140 ... 48
eucalyptus .....	18 ... 2	Scammonium .....	23 ... 0
lemon .....	23 ... 0	Scammony-root ...	80 ... 0
lemongrass .....	85 ... 0	Senega .....	4 ... 0
lime .....	10 ... 1	Senna, Alex. ....	144 ... 25
neroli .....	2 ... 2	Tinnevely .....	124 ... 88
peppermint .....	28 ... 0	Soy .....	20 ... 0
rose (Bombay)...	19 ... 0	Squills .....	39 ... 10
sandalwood .....	2 ... 2	Sticklac .....	1 ... 0
tea .....	1 ... 1	Strophanthus .....	7 ... 0
thyme .....	3 ... 0	Sugar of milk .....	1 ... 1
wintergreen .....	1 ... 0	Sumach .....	184 ... 0
wood .....	10 ... 0	Tamarinds .....	33 ... 1
ylang-ylang .....	144 ... 85	Tonka-beans .....	13 ... 0
Orange-peel .....	48 ... 2	Turmeric .....	92 ... 13
Oris-root .....	18 ... 16	Turtle (dried) .....	2 ... 2
Puree .....	1 ... 0	Vanilla .....	175 ... 30
Quassia-powder ...	3 ... 0	Vermilion .....	15 ... 0
Quinine .....	29 ... 0	Wax (bees') .....	477 ... 224
Rhatany .....	7 ... 0	Japan .....	228 ... 0
Rhubarb .....	297 ... 19	Yellow berries .....	32 ... 0
Saffron .....	22 ... 0		

**ACID, ACETIC.**—Very firm, in sympathy with the condition of the alcohol market, and acetates, especially sugar of lead, have the same tendency, but are not quotably higher.

**ACONITE-ROOT.**—Dark ferox root from Calcutta realised 10s. per cwt.; subject to approval.

**ALBUMEN, EGG.**—A portion of a consignment from Havre sold at 1s. 10d. per lb.

**ALMONDS, BITTER.**—For a small parcel of peach-kernels 40s. per cwt. was paid.

**ALOES.**—No Socotrine was sold, 75s. to 80s. per cwt. being the limit for fine hard and good pale orange; private sales have been made at the lower figure. Good livery Curaçao in gourds sold at 14s. 6d. to 18s. 6d. after some hesitation, but the bulk of the parcel was bought in at higher rates. Good pale hard Zanzibar, in skins, brought 72s. 6d. to 80s., and inferior 60s. to 67s. 6d. per cwt. Cape: the best lots were held for 25s. 6d., and what sold was good bright hard, 23s. 6d. to 24s.; medium, 20s. 6d. to 22s.; dull and frothy, 12s.

**AMBERGRIS.**—The best lots were limited at 87s. per oz., no bids being made; for inferior dark and grey, 30s. and 48s. per oz. was paid.

**ANISEED.**—Good Russian sold at 17s. (another lot was limited at 18s.), and for Alicante 21s. per cwt. was wanted. A case good bold whole *Star* anise sold at the high figure of 5l. 10s. per cwt.

**ANNATTO-PASTE.**—A bright lot of thinnish paste sold at 4d. per lb. subject.

**ARGOL, CAPE.**—Good firsts sold at 50s., and dark seconds at 40s. to 45s. per cwt.

**ASAFETIDA.**—In more demand at easier rates. Of a parcel of 85 packages 64 sold at 40s. to 44s. for loose block, part rather heavy; 35s. for fair almondy block; brown heavy and sandy, 29s. to 30s.; and common brown earthy, 25s. to 28s. per cwt. Some fine pale tear of rich flavour sold at varying prices between 70s. and 80s., and another lot of the same, but not of so high a quality, at 57s. 6d. to 68s. per cwt.

**BALSAM COPAIBA.**—Filtered Maracaibo, said to be B.P., brought 1s. 6d., and unfiltered Bahia 1s. 5d. per lb.

**BENZOIN.**—All kinds in poor demand. Of Sumatra qualities fine white seconds, small to medium almonds, sold at 9l. 12s. 6d. to 12l. per cwt., without reserve, the dearer parcels being very fine. Fair seconds, small to medium pale almonds, fair aroma, partly false-packed corners, sold at 5l. 2s. 6d. to 5l. 10s., and best ditto was bought in at 6l. 10s. Dull low brown, glassy and barky, sold without reserve, at 87s. 6d., and one lot at 97s. 6d. Of *Siam* little sold. Brown blocky siftings fetched 44s. For medium to bold pale detached almonds, well-picked, and of fine aroma, 20l. was bid and refused. Fair glassy *Penang* sold at 55s. to 57s. 6d., and common thirds at 32s. 6d. Fair *Palembang* sold at 45s. to 46s.

**BIRDLIME.**—For Japanese, offered without reserve, 3½d. per lb. was paid.



**BUCHU.**—A parcel of 6 bales, offered without reserve, sold cheaply at 3*d.* per lb. for fair round, part stalky and yellowish. Good green rounds, part stalky sold at 6*d.* to 6½*d.*, and a bid of 3¾*d.* per lb. was refused for pale longs, 7*d.* being wanted.

**CALUMBA.**—Two out of six strings offered were disposed of at the following rates:—Poor dark wormy root, 8*s.* per cwt.; brighter ditto, 11*s.* 6*d.*; native-washed, 15*s.*; picked ditto, 18*s.* 6*d.* to 19*s.*

**CAMPOR.**—There has been more inquiry for crude this week, but no business has been done. Quotations are higher, London quoting 103*s.* per cwt., c.i.f., for Chinese, and 104*s.* for Japanese. The Eastern markets appear to be in an excited state, Hong-Kong being especially firm at 108*s.* per cwt., c.i.f.—a quotation which we give with all reserve, although there is no question that the Hong-Kong market is much firmer than this one, the recent arrivals here having eased matters a bit. Refined camphor is in good demand, at unchanged rates. In auction nine cases of Japanese refined (1-oz. tablets) passed the hammer at 1*s.* 4*d.* per lb.

**CANELLA ALBA.**—Privately 26*s.* 6*d.* per cwt., c.i.f., is asked; and from New York an increasing demand is reported. A parcel of fair bold white sold publicly at from 37*s.* to 37*s.* 6*d.* per cwt.

**CANNABIS INDICA.**—In fair demand, the bulk of a parcel of good green compressed and part dusty selling at 6*d.* to 6½*d.* per lb.

**CANTHARIDES.**—Good Spanish realised 1*s.* 8*d.* per lb.

**CARDAMOMS.**—Finer qualities of Mysore were scarce in auction, and sold at 3*d.* per lb. advance, but lower qualities were easier. The following are the sale-rates:—Ceylon-Mysore, fine "Duckwaris," 4*s.* 3*d.* to 4*s.* 4*d.* per lb.; good bright pale, full seeded, 3*s.* 9*d.* to 3*s.* 11*d.*; medium ditto, 3*s.* 5*d.* to 3*s.* 10*d.*; dull ditto, 3*s.* 3*d.* to 3*s.* 4*d.*; small to medium pale round, 2*s.* 8*d.* to 3*s.* 2*d.*; pale medium longs, 3*s.* 2*d.* to 3*s.* 6*d.*; spotty and dark ditto, 2*s.* 7*d.* to 2*s.* 9*d.*; small ditto, 2*s.* 8*d.*; good splits, 2*s.* 4*d.* to 2*s.* 9*d.*; dark ditto, 1*s.* 9*d.* to 1*s.* 11*d.* Medium to bold brown Ceylon-Malabars sold at 2*s.* 8*d.*; small to medium ditto, 2*s.* 1*d.* to 2*s.* 2*d.*; and poor and small fruit, 1*s.* 7*d.* Wild native longs were in large supply, and sold at 3*s.* 6*d.* to 3*s.* 8*d.* for the best, and 3*s.* 3*d.* to 3*s.* 4*d.* for seconds. Grey seeds, 2*s.* 6*d.* to 3*s.*; brown ditto, 2*s.* 10*d.*; mixed, 2*s.* 8*d.*

The total exports from Ceylon from January 1 to December 20 were:—1898, 487,361 lbs.; 1897, 502,524 lbs.; 1896, 406,061 lbs.; and 1895, 333,286 lbs.

**CASCABILLA.**—Rather thin papery, of good colour, sold at 31*s.*, and dark ditto, without reserve, at 10*s.* per cwt. Another consignment was bought in.

**CHIRETTA.**—Good was limited at 6*d.* per lb., at which figure sales are reported privately.

**CINCHONA.**—At the Amsterdam auctions last week there was a good demand, but in consequence of larger shipments from Java prices declined by 0.17*c.* The unit moved between 3½*c.* and 5½*c.*, the average being about 4½*c.* (4.70) per half-kilo., as against 4¼*c.* (4.87) paid at the previous auctions. The total weight of manufactured bark sold was 628 tons, containing about 30 tons of quinine sulphate. The highest price paid was 90*c.* per half-kilo. (1*s.* 6*d.* per lb.) for 2 cases of fine long Succirubra quill, and the highest quinine-sulphate equivalent was 12.24 per cent. contained in 18 bales of Ledgeriana broken quill of Government culture, which sold at 53½*c.* per half-kilo. The stock of unsold Java bark at Amsterdam on December 31 was 2,657 packages Government and 9,478 packages private grown bark. The next auctions in Amsterdam will be on February 15. To-day good Huanoco quill realised 6¾*d.* to 7½*d.*, and Loxa quill, 11½*d.*; good red Guatemala quill sold at 2*d.*, and chips at the same price; for Java trunk bark of fair colour 1*s.* 3*d.* was paid, and fine thin Guayaquil 5*d.* and 6½*d.*; mossy crown bark, 4½*d.* and 4¾*d.*; a bid of 4¼*d.* was refused for Java red quills, the buying-in price being 6*d.*; flat Yellow bark, rather musty, sold at 6½*d.* to 7*d.*, the best lots being held for 10*d.* per lb.

**COCA-LEAVES.**—Ordinary Truxillo are quoted at 7*d.*, and light green at 7½*d.* per lb., c.i.f., and for Huanoco of dark green quality 10*d.* c.i.f. is wanted. In auction 8½*d.* per lb. was refused for good Huanoco.

**COCCULUS INDICUS.**—Good seed sold at 8*s.* 6*d.* per cwt.

**COLOCYNTH.**—Good medium to bold white Turkey apple sold at 11*d.* per lb.

**CROTON-SEED.**—Lower. Good bright Ceylon sold at 70*s.* per cwt., and inferior at 55*s.* to 60*s.* For a lot of small to medium a bid of 45*s.* is to be submitted.

**CUBEBS.**—In better demand at lower prices. Sales comprised stalky and shrivelled grey berries (without reserve), at 23*s.*; bold stalky, at 24*s.*; and ditto small, 23*s.* 6*d.* per cwt.; fine grey sifted was held for 26*s.*, and for a parcel of stalky unsifted a bid of 24*s.* per cwt. was rejected.

**CUTTLEFISH.**—Medium to bold white good realised 2½*d.* per lb. A parcel of 59 mats, catalogued, did not arrive in time.

**DRAGONS'-BLOOD.**—A case of fine fiery saucers sold with good competition at 16*d.* per cwt., and ditto lump, not so good, at 11*d.* 10*s.*; 6*d.* 10*s.* was refused for slabs of poorish colour, and 10*d.* 12*s.* 6*d.* for fine lump in saucers. Poor brickly slabs sold at 5*d.* 5*s.*

**ELATERIUM.**—A consignment from Malta sold without reserve at 6*d.* to 7*d.* per cz.

**ERGOT OF RYE.**—Sound new Spanish was limited at 2*s.* 9*d.* to 2*s.* 10*d.*, and weevily at 1*s.* 4*d.* and 1*s.* 10*d.* per lb.; Russian 2*s.* 4*d.*, and weevily at 1*s.* 3*d.* per lb. It looks like coming down.

**GAMBOGE** was in fair demand at unchanged prices. Good bright loose picked orange pipe being bought in at 9*d.* and a few cases of fair colour, broken and partly run pipe sold at 6*d.* 5*s.* to 7*d.* per cwt.

**GENTIAN.**—Four parcels offered, but only two bags sold at 14*s.* 6*d.* per cwt. (without reserve) for thick dark; bold rough from Marseilles was limited at 17*s.* 6*d.*, and bids of 14*s.* and 15*s.* 6*d.* were refused for others.

**GUINEA GRAINS** were limited at 60*s.* per cwt.

**GUM AMMONIACUM** sold at lower prices, 44*s.* being paid for fine white tear, partly blocky; ditto, blocky and seedy, 35*s.*; and for low dark block 22*s.* 6*d.* was asked, 19*s.* being refused.

**GUM ARABIC.**—Market for Persian insoluble is very firm, and a fair business is passing at 22*s.* 6*d.* to 23*s.* per cwt. for good pale sorts, red ditto 21*s.*, and unworked at 16*s.* to 18*s.* per cwt. Small sales of Aden have been made at 52*s.* 6*d.*, good Cawnpore at 45*s.*, and fair Ghatti at 16*s.* to 17*s.* per cwt. Soudan sorts are quiet, holders asking high prices. In auction fine-picked Trieste grain sold at 6*d.* 12*s.* 6*d.* to 7*d.* per cwt., and good sorts at 80*s.*; another lot of sixteen packages was taken out without mention of price.

**GUM GUAIAECUM.**—In small supply; fair green medicinal resin sold at 1*s.* 8*d.* per lb. Poor blocky dark was sold without reserve at 3*d.* per lb.

**HONEY.**—Jamaica was the only kind in demand to-day, and set white sold at 23*s.* per cwt.; darker, and not quite clear, 21*s.* and 22*s.*; syrupy, 20*s.* 6*d.*, subject; and poor, 18*s.* per cwt. Set white Honolulu was bought in at 22*s.* 6*d.*

**IPECACUANHA.**—Cartagena was all cleared at about 3*d.* per lb. lower all round, 6*s.* 2*d.* to 6*s.* 6*d.* being paid for stout bold, 1 c.c. damaged, and short-picked root, at 6*s.* 3*d.* per lb.; 6*s.* 5*d.* is to be submitted for a fine lot of picked. Rio, rather thin and stringy root sold at 9*s.* 6*d.* to 9*s.* 8*d.*, and first-class damaged at 9*s.* 7*d.*; wiry to fair root sold at 9*s.* 8*d.*; for the best lots 9*s.* 10*d.* was wanted.

**JALAP.**—New York advices report sales of about 8,000 lbs. at 14*c.* per lb., and from the present outlook higher values are expected; 7½*d.* c.i.f. is asked for fine heavy root. Small Vera Cruz root sold in auction without reserve at 5¾*d.*, but good clean worked was limited at 8*d.* per lb.

**KOLA.**—In auction 4*d.* was paid for dull and poor West Indian and 2*d.* per lb. for low and dark, while another lot of unwashed W.I. realised 3*d.* to 3½*d.*, and mouldy 2½*d.* For fine bold washed W.I. 5*d.* was wanted, and small African 4*d.* per lb.

**LIME JUICE.**—Unworked W.I. sold at 6*d.* per gallon.

**MATICO-LEAVES.**—Rather ordinary sold at 2½*d.* per lb.



**MENTHOL.**—Unchanged, but firmly held; private business is reported at 7s. 9d. per lb. on the spot. The stock here is small, and in the hands of strong holders. In auction nine cises and eleven tins of fair dry and dullish crystals were limited at 7s. 6d. per lb.

**MYRRH.**—In fair supply and good demand, at about unchanged prices. The following were some of the prices paid: medium to bold good picked Aden, 90s.; fair Aden sorts, 64s. to 65s.; pea siftings, 47s.; grain siftings, 43s. to 45s.; ditto powdery, 34s.; dull sorts, poor flavour, 30s., and dark pickings, 8s. per cwt.

**NUX VOMICA.**—Nice bright East Indian all sold at 10s. 3d. per cwt.

**OIL, BERGAMOT.**—For one brand of new crop 9s. per lb., c.i.f., has been paid this week. A bid of 6s. 6d. was refused in auction for a lot of Pasquale's make.

**OIL, CASSIA.**—In auction 10 cases of dark unworked 79 per cent. were held for 4s. 9d., and a case of 75 per cent. to 80 per cent., offered by another broker, sold at this figure.

**OIL, CASTOR.**—Dearer. Italian tasteless, 32s. per cwt.; water-white, 31s., c.&f. London; Belgian first-pressing, 27s. 6d. spot; and second-pressing, 26s. per cwt. Hull-drawn oil is quoted 28s. 6d. per cwt., for medicinal, in barrels, or 3 $\frac{7}{16}$ d. per lb. in cases; firsts, 25s. 6d. and 3d.; seconds, 24s. 6d. and 2 $\frac{3}{4}$ d. per lb., ex wharf London.

**OIL, CITRONELLA.**—Privately a small business has been done in drums at 10 $\frac{3}{4}$ d. per lb., c.i.f. for January-March shipment.

**OIL, EUCALYPTUS.**—A "globulus" oil, so-called "extract," sold without reserve at 1s. 7d. per lb.

**OIL, LEMON.**—The firm tendency continues, and business has been done privately at last week's quotations. Battalioni's was limited at 3s. 6d.

**OIL, LEMONGRASS.**—Privately there are sellers on the spot at 2 $\frac{7}{8}$ d. per oz., but business is slow. In auction bids of 2 $\frac{3}{4}$ d. and 3 $\frac{1}{4}$ d. were refused, 2 $\frac{1}{2}$ d. being limit for the former.

**OIL, LIMES.**—Water-white distilled realised 2s. 6d. per lb.

**OIL, NEROLI.**—Good water-white oil sold at 2s. 3d. per oz.

**OIL, SANDALWOOD.**—Two pots of East Indian distilled dark oil, quite fluorescent from petroleum addition, sold at 1 $\frac{3}{4}$ d. per oz., without reserve.

**OIL, TEA.**—A parcel of fair sold at 1d. per lb., subject.

**OIL, YLANG-YLANG.**—A large lot of Legardia's brand offered without reserve sold at 2s. 3d. to 2s. 4d. per oz.

**QUININE.**—The demand from the manufacturers has slackened off a bit, for which they are not sorry, as they are busy executing the orders received during November and December. There is no change in values. In auction 10d. per oz. was bid and refused for the "Imperial" brand, 10 $\frac{1}{2}$ d. being the limit, and 10 $\frac{3}{4}$ d. was bid and refused for B.S. *Taillandier's* was bought in at 10 $\frac{3}{4}$ d. per oz.

A Java local paper intimates that the Pandar-Aroem factory has delivered the first 100 kilos. (3,500 oz.) of its quinine sulphate to the Government, and that it is considered to be highly satisfactory in quality. This is the second factory now producing quinine in Java.

**RHUBARB.**—In auction easier rates were accepted. The supplies were large and good, but little was sold, as the following sale-report shows:—Round and flat medium Canton, Shensi character, 11d. to 1s.; round and flat pickings, 9d., subject. In *Shensi* there were no sales. For good druggists' trimming, compact, good fracture, 2s. 9d. is wanted, and 2s. 3d. for seconds ditto. In *High-dried*, good flat, fair fracture sold at 10d. For common round rough flat 4 $\frac{3}{4}$ d. was bid and refused, 5 $\frac{1}{2}$ d. being the price.

**SAFFRON.**—The importers' price has now advanced to 42s. per lb.

**SARSAPARILLA.**—Good supplies of all kinds. Good Jamaica grey sold at 1s. 8d. for sound, 1s. 7d. for first-class damages, 1s. 5d. for seconds, and 1s. 2d. to 1s. 3d. for thirds; dull native red ditto limited at 1s. 5d., and a bale of country damaged sold at 10 $\frac{1}{2}$ d.; bold Guayaquil sold at 1s. 1d. for first-class damages; poor Honduras sold at 11 $\frac{1}{2}$ d.; good

fibrous Lima Jamaica sold at 1s. 1d. for first-class damages, and 1s. for seconds; Mexican was limited at 6 $\frac{1}{2}$ d.

**SENNA.**—The small supply offered of Tinnevely to-day was eagerly bought up at higher rates, as much as 7d. being paid for four bales of exceptionally fine green leaf; other prices paid were 6 $\frac{3}{4}$ d., 6 $\frac{1}{4}$ d., and 6d. for the same grade but slightly country-damaged; medium to bold green leaf, 2 $\frac{3}{4}$ d. to 3 $\frac{1}{2}$ d.; good medium, part brown and yellowish, 2 $\frac{1}{2}$ d., small to medium; spotty, brown, and damaged 2d., and pods, 1 $\frac{3}{4}$ d. per lb.. Of *Alexandrian* very little was sold: small to medium narrow leaf realised 2d.; medium brown and stalky, 1d.; and good pods, 4d. per lb.

**SENEGA.**—Privately fine Minnesota root is offered at 1s. 1 $\frac{1}{2}$ d. per lb. c.i.f.; dark and broken 1s. 0 $\frac{1}{2}$ d.

**SQUILLS.**—Good, but slightly dull slice sold at 3d. per lb., the private selling rate.

**TURMERIC.**—Fair round Cochin finger sold at 15s. per cwt., and for a fine lot of Madras ditto a bid of 31s. per cwt. was refused.

**TURTLE.**—Dried tortoise is not so familiar to many who attend the sales as *decoctum testudinis marinæ*, and when a lot came before the druggists to-day, some curiosity was evinced, not so much about the article, as to what the buyer was to do with it at 3s. 6d. per lb.

**VANILLA.**—The small supply offered to-day was firmly held, and the bulk was bought in, holders not appearing anxious to sell. The following prices were paid:—*Seychelles*, of fair colour, 6 to 7 in., 22s.; 5 $\frac{1}{2}$  to 6 $\frac{1}{2}$  in., 20s. 6d. to 21s.; 5 $\frac{1}{2}$  to 6 in., 20s.; 6 $\frac{1}{2}$  to 7 in. (poor), 15s. per lb. No Bourbon were sold, 15s. 6d. being refused for 4 to 4 $\frac{1}{2}$  in. Mauritius large bold beans of full flavour, slightly crystallised:—7 $\frac{1}{2}$  to 8 in., 25s.; 6 $\frac{1}{2}$  to 7 in., 22s.; 6 $\frac{1}{2}$  in., 21s. to 21s. 6d.; 6 in., 21s.; 5 $\frac{1}{2}$  to 6 in., 20s.; 5 $\frac{1}{2}$  in., 19s. 6d.; 5 to 5 $\frac{1}{2}$  in., 20s. 6d.; 5 in., 20s. No Tahiti were disposed of; several parcels catalogued were not up in time.

**WAX (BEES').**—In good demand, and prices are "full-up." Good yellow Angola sold at 6l 5s. subject; good yellow Australian mixed, 6l. 12s. 6d.; good Jamaica, fair sorts, 7l. 2s. 6d. to 7l. 5s.; Madagascar, dark brownish yellow, 6l. to 6l. 2s. 6d.; good yellow Mozambique, 6l. 7s. 6d.; Rhodesia, 6l. 5s. to 6l. 7s. 6d.; good yellow Zanzibar, 6l. 5s. to 6l. 7s. 6d.; mixed and part wormy, 5l. 5s. to 5l. 15s.

## Coming Events.

### Tuesday, January 24.

*Sheffield Pharmaceutical and Chemical Society*, Montgomery Hall, Surrey Street, Sheffield, at 8 p.m. Lantern-lecture "Five European Capitals," by Mr. W. L. Howie.  
*Midland Pharmaceutical Association*, Mason University College, Birmingham, at 8.30 p.m. Discussion on the new B.P., opened by Mr. F. H. Alcock.

### Wednesday, January 25

*Nottingham and Notts Chemists' Association*, at 8 p.m. Lecture on "Five European Capitals," by Mr. W. L. Howie.  
*Edinburgh Chemists' Assistants' Association*, at 9.15 p.m., "The Profession of Pharmacy," by Mr. W. M. Lock.

### Friday, January 27.

*Aberdeen Junior Chemists' Association*, at 9.30 p.m. Magazine evening by Mr. W. May.  
*Irish Pharmacists' Assistants' Association*. Lantern-lecture "Popular Artists of the Day."

*Chemists' and Druggists' Society of Ireland (North Branch)*.—The annual meeting and *conversazione* will be held in St. George's Cafe, High Street, Belfast, on Thursday evening, February 2, 1899, at 8 o'clock. Programme:—Annual report, election of officers and committee, cinematograph, &c.

**CHARGE OF FALSE PRETENCES.**—The South Holland (Spalding Division) Magistrates have remanded a well-educated man named Thomas Arthur Marshall Stevens, described as a chemist and druggist, on a charge of obtaining 5l. 7s. 6d., by false pretences, from James Smith Foreman, innkeeper, of Luton.



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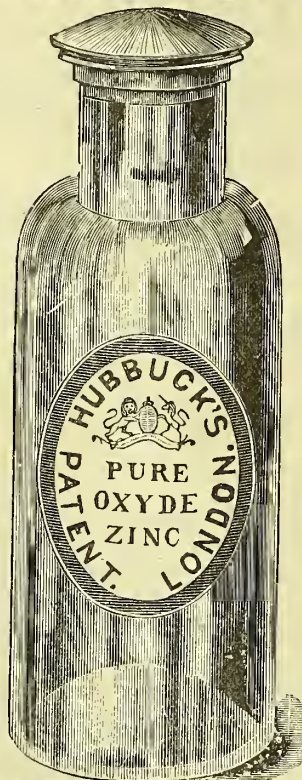
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of Pure Oxide; in fact, the impurities are  
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The Manufacturers supply their Pure Oxide  
Wholesale only, in quantities of not less  
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**SAMPLES FREE.**

# EMULSION

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# EMULSION

OF

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Put up in several different styles, with Customer's  
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Palatable.

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Hydrogen Peroxide and Pure Acids, Bismuth, Mercurial and Iron Salts,  
Granular and Scale Preparations, Ethers, Essences, Spirits (in Bond). [3] [6]

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such specific poisons as Colchicum, Calomel, or Mercury,  
and the most effective cure yet discovered for

**GOUT AND RHEUMATISM.**

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Gives speedy relief in cases of Inflammatory Rheumatism or  
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Will be found wonderfully efficacious for lame back,  
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It will be seen that this is very much less than the quantity used in other preparations authorised by the Pharmacopœia.

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Manufacturers of Granular Effervescent Preparations. We shall be glad to give specially favourable quotations, and send samples of our superior Nos. 1, 2, and 3 qualities of CITRATE OF MAGNESIA.

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Cod-liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot, Otto de Rose, and all Essential Oils.



### IMPORTERS OF

Valentia Saffron; Vanillas; Fruit Essences; Carmine, Aniline Dyes; Bees' Wax, selected Smyrna Opium, &c.

MANUFACTURERS of Very Superior Flexible Gelatine Capsules of Balsam Copaiba, Cascara Sagrada, Castor Oil, Cod-liver Oil, Santal Oil, and Blaud's Pill Capsules, equal to 1, 2, and 3 pills. Samples and Lowest Quotations per 1,000, or in Boxes for Retail, will be sent on application for either the Wholesale or Retail Trade.

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FOR STONE, PORCELAIN, POTTERY, & ALL VITREOUS SUBSTANCES.

Requires no preparation, easy and clean in application, and can be made to resist water.

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**ANTI-ANÆMIC! INVIGORATING! RECUPERATIVE!**

This Powder is an agreeable and pleasant remedy for Ailments amongst CHILDREN, ADULTS, and the AGED; and this new discovery is a perfect substitute for Cod Liver Oil, possessing all its properties, and causing no Nausea, Eructations, or Heartburn.

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Fortifies the  
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Appetite,  
Induces Natural  
Sleep,  
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Frame,  
And is a  
Most Vigorous  
Reconstituent.



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## KIRN'S PHOSPHO- LACTINE

Is Efficacious in  
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A SAFE and CERTAIN REMEDY for CHILDREN DURING and AFTER SICKNESS.

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DOUBLE CYANIDE  
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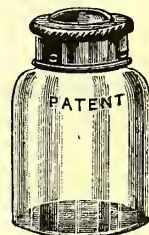
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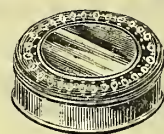
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## "The Chemist & Druggist"

# WINTER ISSUE

JANUARY 28, 1899.

Advertisements cannot be received for insertion in this number after Tuesday next, the 24th instant. Firms requiring space should communicate immediately with

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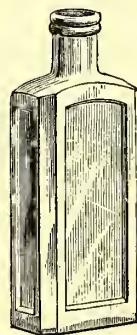
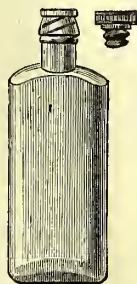
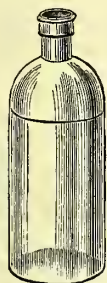
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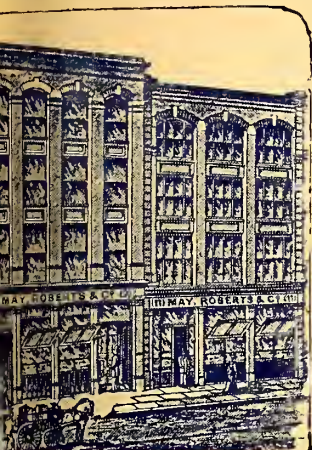
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